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The MODERN HOSPITAL

Vol. V *August, 1915* No. 2

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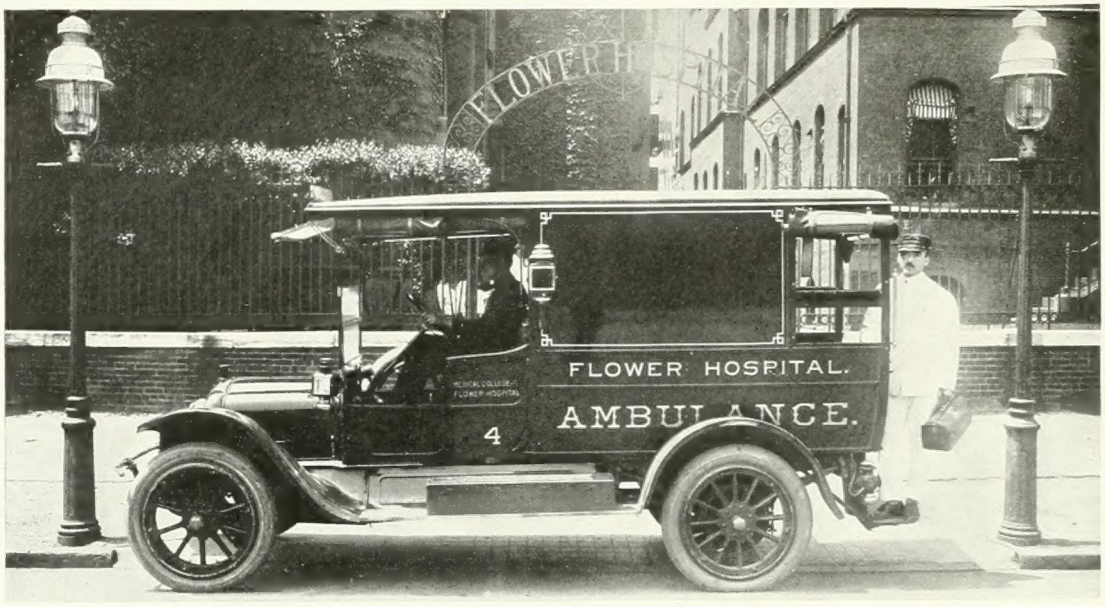

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THE hospital is not bounded by its four walls. No superintendent, physician or trustee believes that it is.

Ambulance service should receive consideration on a par with that given a new wing or operating amphitheater. Ambulance service is nothing more or less than an extension of the service within your walls.

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Write to us for a list of hospitals using White ambulances and investigate the results these hospitals are getting.

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—

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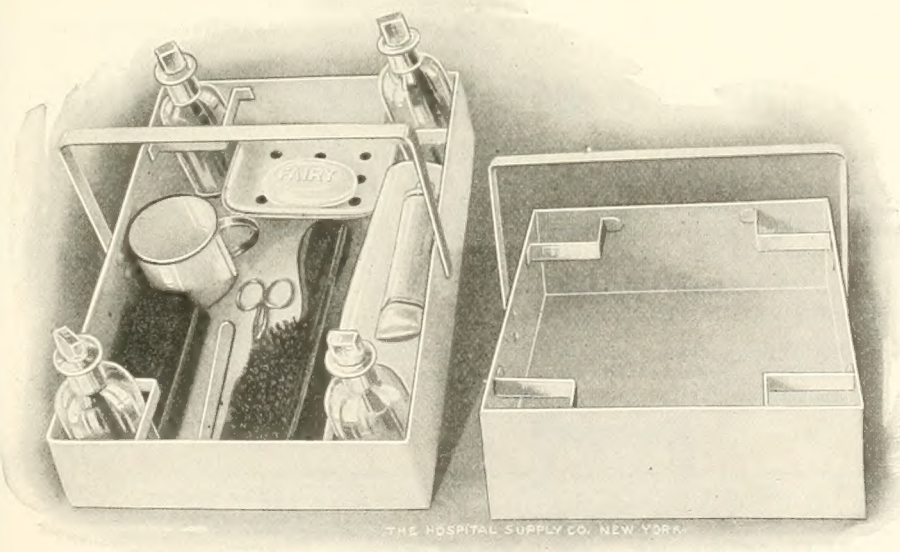

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This very useful basket should find a place in every Hospital for carrying all of the necessary articles for making the toilet of patients, "scrubbing-up," and also for various other similar purposes. Made entirely of white enameled steel, with handle and holders for 4 bottles.

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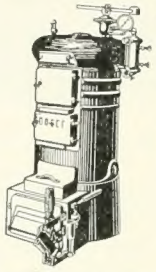

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AUTOGENOUS VACCINES 5.00

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C. CHURCHILL CROY, M. D., Director of Bacteriological Department.
THOMAS L. DAGG, M. D., Director of Pathological Department.

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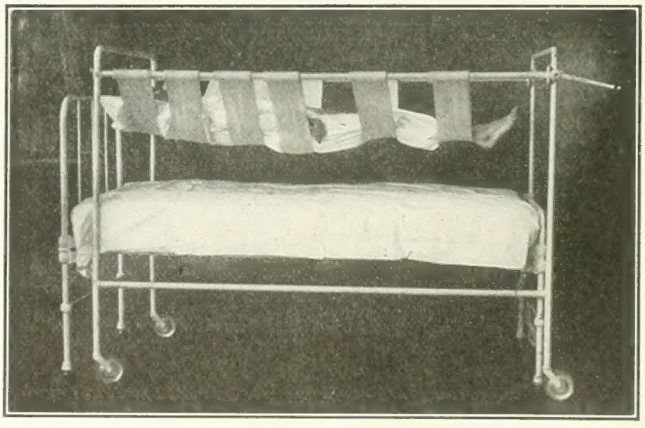
FLOYD INVALID LIFTER



WITHOUT mechanical knowledge nor the use of any tools, a nurse can place a FLOYD LIFTER over a bed and lift a patient above the mattress and linen so that both can be removed from the bed, as shown by the accompanying illustration. The lifting rollers rotate together or separately, so that a patient can be turned on his side. When a patient has been lifted from the bed, neither he nor the LIFTER has any connection with the bed, so that the LIFTER carrying the patient can be removed to another bed, chair, bath or operating table with perfect convenience. When this LIFTER is not being used, it can remain on the bed, as the rollers can be removed in a moment so that nothing is in the way of patient or nurse.

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STAUNTON, VIRGINIA, U. S. A.

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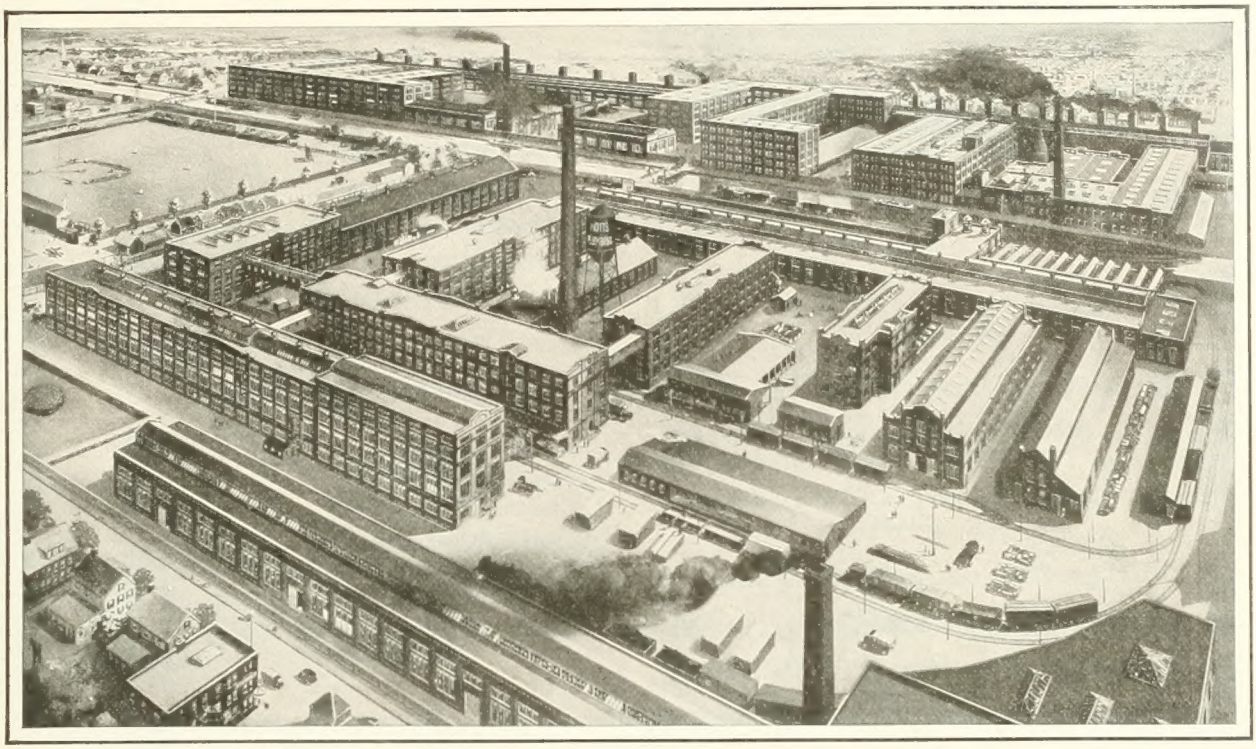
HOSPITAL SANITARY APPLIANCES — HYDROTHERAPEUTIC APPARATUS AND EQUIPMENT FOR OPERATING AND STERILIZING ROOMS. AUTOMATIC HOT WATER SPECIALTIES



Our manufacturing plant at Trenton, N. J., comprising Potteries, Iron and Brass Foundries, Enameling Works, etc., covering twenty-six acres, is used exclusively in the production of "Mott" plumbing fixtures.

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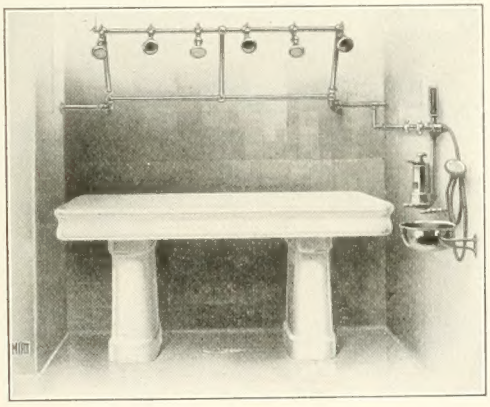

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We are also prepared to demonstrate the automatic safeguard for showers, continuous baths and babies' baths as here illustrated.

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ONE PACKAGE used according to directions, will produce **1 QUART** Larosan-Milk (ALBUMIN MILK) at a cost, including the milk, of 18 to 20 cents.

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Dietetic Remedy for nutritional and digestive disturbances and diarrhoeas especially of infants and children

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We make

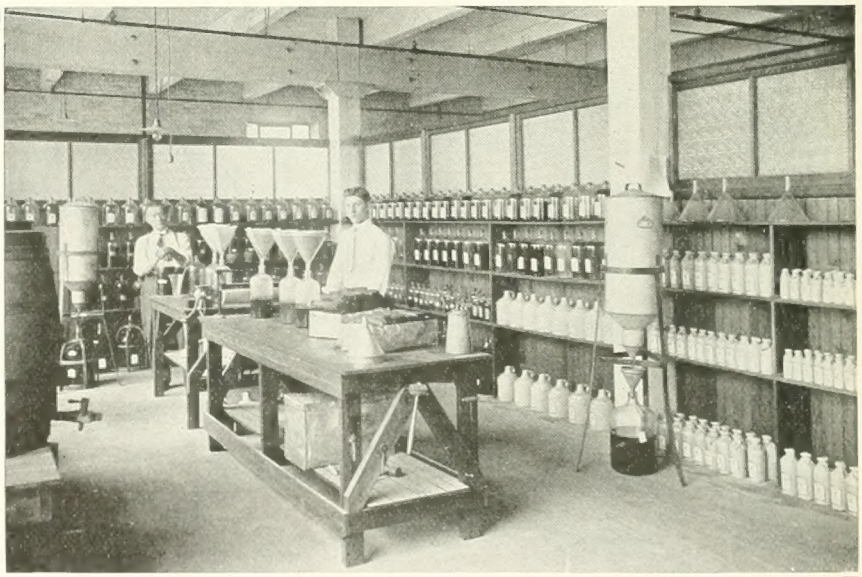
Ariston Extracts

in more than 57 varieties.

All are the best that can be produced, as their name Ariston implies.

Most important by far is ***Ariston Vanilla.*** Made from the choicest of the very expensive vanilla beans from semitropic lands.

The beans—long, slender and very dark in color—come tied in little bundles and carefully packed in boxes such as are seen on the laboratory table in the picture.



In the Laboratory where Ariston Extracts and Flavors are made

Chopped very fine by machinery, the beans are put into barrels, with alcohol, where they remain in maceration for many months, that the resulting extracts may have the Ariston quality. Approximately one pound of beans to one gallon of Ariston Vanilla.

From the barrels the liquor goes to the percolators, two of which appear above as cylinders supported on steel stands, with bottles beneath to catch the finished extract as it drips.

Vanilla and other extracts should be kept away from the direct rays of the sun, to avoid deterioration.

Calumet Tea and Coffee Company

CHICAGO, ILL.

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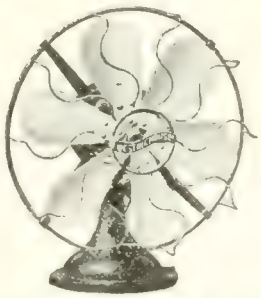


The Most Nervous Patient Does Not Notice—

The Silent Six

The Westinghouse Fan particularly adapted for Hospital use.

Delivers a large volume of air with practically no noise.

Runs a full season with one oiling.

Maintains its full efficiency for years.

Has a swivel-and-hinge joint, making it readily convertible to a bracket fan, and vice versa.

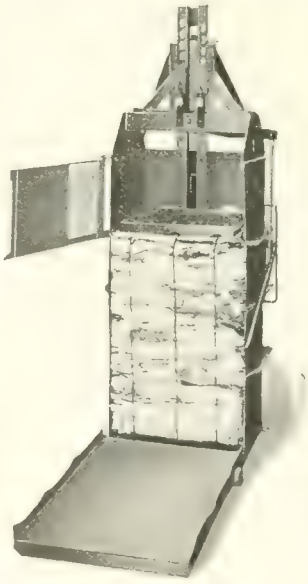
Made in 12-inch and 16-inch blade sizes.

Send for circular describing our complete line of electric fans

Westinghouse Electric & Mfg. Co.

EAST PITTSBURG, PA.

BALE YOUR WASTE PAPER



and fabric into a compact unit and convert into a profit what is now a waste and fire danger to your hospital.

Waste paper can only be sold when baled. It can only be stored when baled. The Alsteel Paper Baler is a fireproof storeroom for waste.

It is not an expense, but an investment. Paper mills and paper stock buyers are anxious to get clean baled paper, and the price is from $7.00 to $15.00 per ton. You will be surprised how quickly a ton accumulates. Why burn money?

A 100-BED HOSPITAL CAN PAY FOR AN ALSTEEL PAPER BALER IN LESS THAN FOUR MONTHS by merely saving what is now thrown away. Its life is indefinite. Figure the profit after it has paid for itself.

An Alsteel Paper Baler means LOWER INSURANCE RATES on your building.

Light, strong, compact, easy to operate. ALL STEEL. Occupies half the space of a bunglesome wooden baler. Can be moved like a truck.

Write for full description and price list.

ALSTEEL MANUFACTURING COMPANY

BATTLE CREEK, MICHIGAN

The Lakeside Hospital, Cleveland, is satisfied with its Alsteel Baler. Ask them. A few of the other hospitals now using: St. Vincent's Charity, Cleveland, Ohio; German Hospital, Chicago; Bellevue Hospital, Bellevue, Pa.

Welch's is bottled sunshine

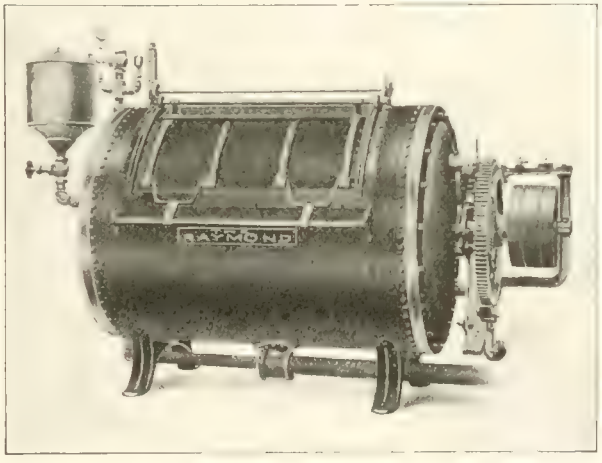
The fresh, tart-sweet flavor of Welch's gives a satisfaction that no other drink does. Nothing takes away the sick-room atmosphere quicker than

Welch's
Grape Juice

Physicians need have no hesitation in prescribing Welch's for their patients. It is just the pure juice of carefully selected, fresh Concord grapes—unsweetened, unfermented, no coloring matter added, no preservatives.

We shall be glad to send you further information and literature of special interest to the medical profession if you will write, addressing

The Welch Grape Juice Company, Westfield, N.Y.



Make your laundry a sterilizing room

PROPER precaution against cross-infection and spreading of disease demands nothing less than sterilizing of all linen in the laundry. You know that this is right; you only ask, "Is is practicable?" Yes, with the

Raymond Sterilizer-Washer

THE RAYMOND STERILIZER-WASHER is a perfect sterilizer, destroying all germs; and a perfect washer, removing all dirt. It does both without allowing fumes or steam to escape into the room. It will also sterilize all bedding, mattresses, clothing, quickly and economically. With it soiled and infected clothing need not come into contact with that which has just been cleaned.

In the Raymond Sterilizer-Washer all doors are *hingeless,* and cannot be opened while there is steam pressure inside; thus SCALDING ACCIDENTS ARE IMPOSSIBLE. The Raymond is built to last. It is the most compact machine on the market, and yet does two to three times the work of most other machines.

The Consolidated Hospital Supply and Laundry Machinery Company
SAUGATUCK, CONNECTICUT

LINEN MARKING

in the institution is probably one of the longest drawn out and most tedious as well as expensive tasks you have.

By the use of
National Marking Machines
this task is made a pleasure. Money is saved, the linen and clothing are marked with a permanent ink, neatly, clearly and legibly.

Write for information

Cut shows one of two machines installed in the New General Hospital, Cincinnati, Ohio.

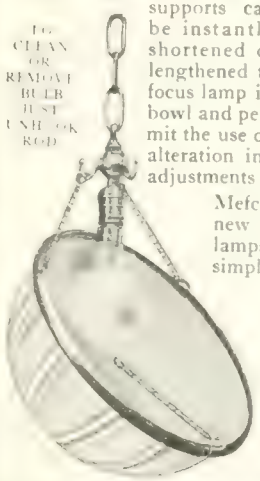
The National Marking Machine Co.
Cincinnati, Ohio

MEFCOLITE

Semi-Indirect Fixture For Hospital Use

Sanitary and Efficient

MEFCOLITES make excellent units for hospital lighting. They are neat in appearance and very easily cleaned. The glass bowl is held securely by a continuous band which is locked in position by one of the supporting arms. These supports can be instantly shortened or lengthened to focus lamp in bowl and permit the use of any type or size lamp without alteration in fixture. There are no screw adjustments in Mefcolite fixtures.



Mefcolites are suitable for use with the new nitrogen or standard tungsten lamps. They are the last word in simplicity. They are neat in appearance, reasonable in cost and thoroughly well made.

Write for prices and particulars regarding [illegible]

H. G. McFADDIN & CO.
38A WARREN STREET
NEW YORK CITY

Something New!

A Hospital Necessity

A tough, hard, floor finish that can be applied over new or old wood floors, making them as easily cleaned and almost as durable as marble.

MARBLEITE

It will not scratch or mar white. It will not show heel marks. Hot water does not hurt it. Write to us and we will tell you about it.

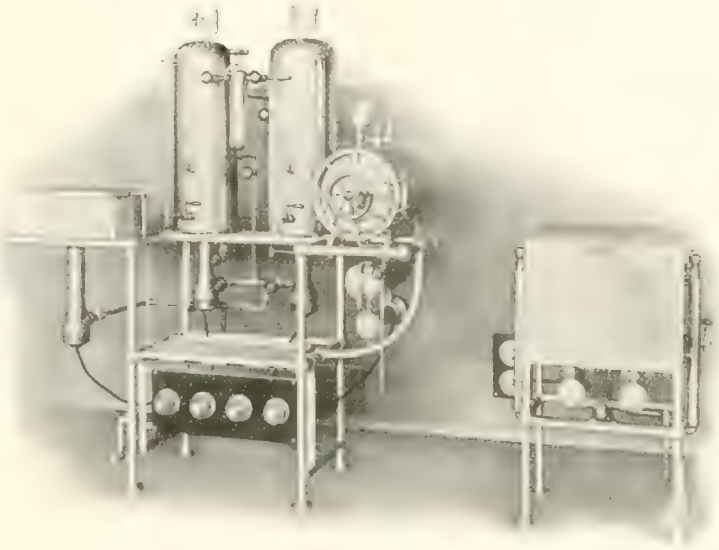
PHOENIX PAINT & VARNISH CO.
124 Market Street Philadelphia

"AMERICAN"

THE PRODUCT OF SPECIALISTS

STERILIZERS—DISINFECTORS

(EXCLUSIVELY)



"AMERICAN" Electrically-Heated "Emergency" Outfit

SIGNIFICANT FACTS

"AMERICAN" Apparatus received the HIGHEST AWARD—GOLD MEDALS—at the St. Louis Exposition in 1904 and again at the Lewis and Clark Centennial, Portland, Ore., in 1905, and has just been awarded the GOLD MEDAL by the Grand International Jury of Awards at the PANAMA-PACIFIC Exposition, San Francisco.

We will gladly furnish further evidence of superiority to any prospective purchaser, for we firmly believe the "AMERICAN" will be the apparatus of your choice when you come to know the difference and what this difference means in the way of superior service and satisfaction.

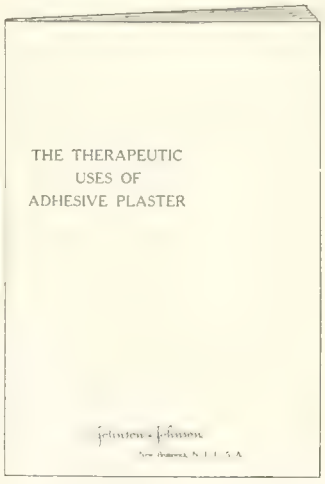
AMERICAN STERILIZER COMPANY

ERIE, PA.

MEMBER ROTARY INTERNATIONAL

MEMBER ROTARY INTERNATIONAL

"THE GOLD MEDAL LINE"



The Therapeutic Uses of Adhesive Plaster

A TWENTY-TWO-PAGE booklet, illustrated with forty-one diagrams, on the above subject, will be sent free to any responsible hospital worker asking for it. Its usefulness is manifold.

Among the therapeutic uses of adhesive plaster explained in this booklet are: as a means of protection, limitation of motion, massage, and (in cases of boils, ulcers, abscesses, mastoiditis, etc.) as a means of producing by compression a healthful hyperemia and of confining the disease. Other uses are, in cases of uterine and ovarian pain; inflammation of the breast; gastric neurasthenia; frost bites; hiccough; neuralgia; ecchymosis; varicose veins; adenoids; typhoid; tuberculosis; pneumonia; as a cosmetic; and in dermatological affections of every kind. Many other uses are suggested in extracts from writings of eminent medical men.

Every intern and nurse should become familiar with the book to further his or her usefulness.

Sent free on request

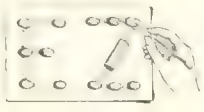
JOHNSON & JOHNSON
New Brunswick, N. J., U. S. A.

See How Easy to Apply the

E.Z. SELF CEMENTING SELF VULCANIZING PATCH

You can time the whole operation, and be thru in less than 60 seconds. Now—ready!

Put the faulty glove on your hand (so that the surface around the tear or puncture is smooth), then, a few brisk rubs with sandpaper to *rough* the fabric. Now, with a pair of tweezers or forceps, remove an E. Z. Patch from the mounting card, moisten its RED, rubbery side with a drop of gasoline, and, after permitting this to dry for a few moments, place the moist side down over the puncture or tear, and press the patch with your thumb for a few seconds so it can firmly adhere.



All done, and all ready for sterilization, where the patch will *actually vulcanize* to the glove.

It's there permanently—can't peel or come off, and it's non-poisonous and non-infecting.

A trial envelope containing 12 E. Z. Patches with full directions for 25c. Hospital size, 100 Patches for $1.00. Sample on request.

THE E. Z. PATCH COMPANY
AKRON, OHIO

WATSON

The Fly Outside
TRADE MARK

20th CENTURY "REWIRABLE"

INSECT SCREENS

ENTRANCE DOORS (Heavy)
Bronze—Steel—Wood

FRENCH WINDOWS (Light Doors)
Bronze—Steel—Wood

WINDOW (Casement, Double Hung, Pivot, etc.)
Bronze—Steel—Wood

PORCH (To meet Every Requirement)
Bronze—Steel—Wood

ROLL (Latest Exclusive Improvements)
Bronze—Steel

Our Engineering Department is at YOUR Service.

WATSON MANUFACTURING CO.
JAMESTOWN, N. Y.

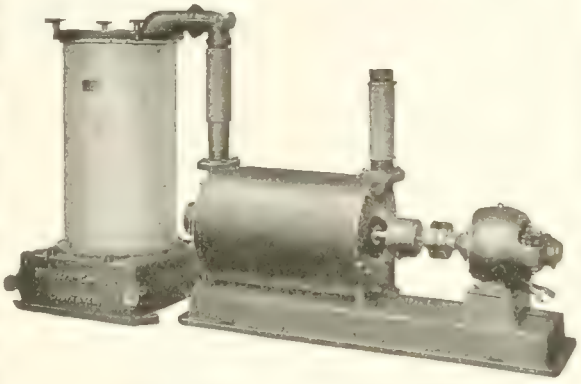
Also manufacturers of "Efficiency" Steel Furniture and Steel filing devices for office, bank, library, vault and HOSPITAL.

Keep Your Hospital Clean with little effort and no disturbance with a

Western Electric

Sturtevant

Vacuum Cleaner



Little head room or floor space needed for our stationary types

One of our vertical stationary types. We have many portable types also—all equally simple and reliable

You can pipe cleanliness to every floor.

These cleaners are reliable, economical and easily installed.

Let our nearest house give you a demonstration and a copy of our bulletin 283AN. We have portable cleaners also.

Western Electric Company

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	Omaha	Oakland
Newark	Savannah	Indianapolis	Oklahoma City	Los Angeles
Philadelphia	New Orleans	Detroit	Minneapolis	Seattle
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EQUIPMENT FOR EVERY ELECTRICAL NEED

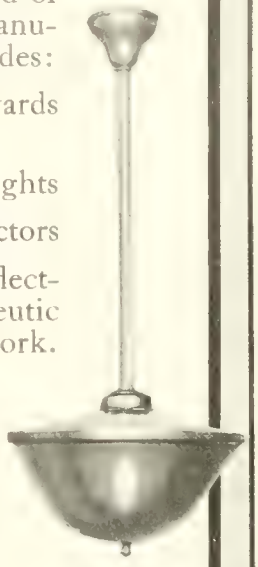
Member Society for Electrical Development Distributed Exclusively

COVERS THE CONTINENT

Johns-Manville Service is an evolution—the growth of half a century's endeavor to insure permanent satisfaction to users of J-M Products, of whatsoever kind. The sale of an article is not the end, it is really the beginning of J-M Responsibility.

Designed Solely for Hospital Use—Frink Hospital Lighting Units

The same study and effort has been made to produce this line of Hospital Lighting material as has been made in any other field of Surgical apparatus manufacture. This line includes:



Lighting Fixtures for wards and rooms

Individual Bedside Lights

Operating Table Reflectors

Floor Lights and Reflecting Units for Therapeutic and Microscopic Work.

In view of the completeness of this line many of the most modern hospitals have adopted it for all their lighting requirements.

H. W. Johns-Manville Co.

New York and Every Large City

Frink and J-M Linolite Systems of Illumination
Mitchell Vance Lighting Fixtures and Bronzes
and, Gill Brothers Company Parian Ware

Night view of ward in Post-Graduate Hospital, N. Y.
Frink Daylyte Ward Reflector

THE little tray spread with its N. B. C. lunch is an appetizing picture. It suggests little effort in the eating—less work for the digestive organs and yet supplies just the food elements needed for dietary purposes.

Any of the following list may be easily procured whenever and wherever wanted—always fresh and crisp, clean and wholesome: N. B. C. Zwieback, Graham Crackers, Eggnells, Uneeda Biscuit, Oatmeal Crackers, Water Thin Biscuit, Bent's Water Crackers, Dinner Biscuit.

NATIONAL BISCUIT COMPANY

YOU can give any or all of your patients the benefits of an open-air sanatorium, at slight expense.

Open-air sleeping contributes to rapid convalescence of patients of many classes.

A Detachable Sleeping Porch

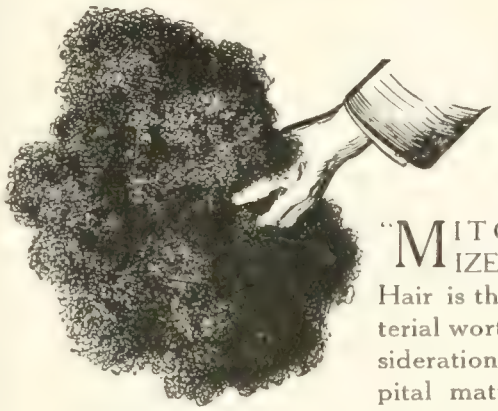
THIS is a steel frame covered with strong steel web and fine insect screen. It can be attached solidly in two hours so that it will support a weight of 2,000 pounds. It can be as easily detached without marring the walls.

The awning is of heavy duck, and a curtain of the same material is on three sides, which can be raised from the floor upward to any height desired. Send for information.

KORFF MFG. CO., Center St., Lansing, Mich.

Douglas Plumbing Fixtures used Throughout New Cincinnati General Hospital

THE JOHN DOUGLAS CO.
CINCINNATI, OHIO



Some Features of Interest in Mattresses and Pillows

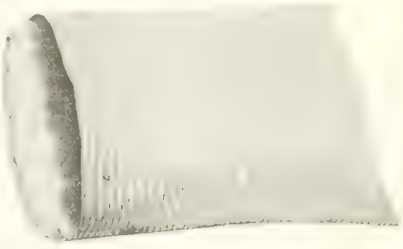
MITCHELL'S SANITARY, STERILIZED FILLING

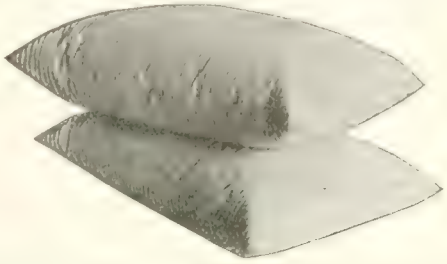
"MITCHELL-IZED" Curled Hair is the only material worthy of consideration for hospital mattresses. A mattress filled with "Mitchellized" Curled Hair can be sterilized, washed, fumigated or disinfected at will without losing its resiliency. It is practically indestructible.

MITCHELL'S PERFECTION BRAND Pure Feather Pillows are filled with **pure feathers**, screened by a process which removes every particle of foreign matter. They are pillows for perfect sleep.

Send for our "Treatise on Mattresses and Pillows" before buying.

MITCHELL'S "COOL SLUMBER" Pillows are valuable accessories to the hospital. They add much to the comfort of patients, keeping head up in the fresh air. The ticking is removable, and the contents may be taken out, disinfected, and replaced.





Knee rolls and other cushions made for all purposes.

THE P. R. MITCHELL CO.
Established 1854
CINCINNATI NEW YORK

THE next time you buy rubber sheeting ask for

Imperial RUBBERIZED

It's manufactured by a process that insures you absolute satisfaction.

"Imperial" sheeting will stand the most rigorous sterilization in steam or water; it is not affected by dry heat, acid, alkaline or saline solutions; its perfect coating resists the action of urine.

Manufactured from the strongest cotton fabrics and rubberized by this special process, it will give long service and will not peel, crack or harden. Samples on request.

Sold only through jobbers

Rosenwald & Weil

Rubberizing Plant
1514-24 West Kinzie St. CHICAGO

ADAM WUEST

Tuftless, Sterilized, Curled Hair

MATTRESSES

are made in *pre-shrunk* removable ticking, which can be laundered or sterilized. When it is put on the mattress after laundering it will *still fit.*

The filling material can also be sterilized or washed, and will retain its resiliency unimpaired. As the inner covering of this filling is of light muslin, there is no interference with sterilization.

GUARANTEED A BEDDING

ADAM WUEST
514 East Pearl Street CINCINNATI

The Pfaudler Glass Enameled Steel Laundry Chute

Specification for Laundry Chute

Provide and install laundry chute where shown. Same shall be glass enamel lined, 24 inches inside diameter, and not over 2 feet 5 inches outside diameter of flange.

The chute shall be made of steel, properly flanged and bolted together in sections or rings not to exceed 48 inches long. Door sections shall be of length to receive the openings where shown.

Provide and set at each floor where shown German silver doors, with either plate glass or polished wire glass set in rubber bed to prevent jarring.

Doors to be 22 inches in diameter and equipped with closing clamps, which permit their being closed water-tight.

Throat to which door is attached shall be of steel welded to chute proper and enameled. The bottom of chute shall be closed with head of enameled steel, with 2-inch outlet bushing for drain connections.

Chute shall be provided with four legs for its proper support. Additional supports shall be provided at each floor. These supports to consist of ⅝-inch tie rods and three angle irons to rest in steel work at each floor.

The enameling of the interior shall extend into section joints. All sections shall be erected in accordance with the manufacturers' direction.

All joints shall be properly packed so that the chute shall be water-tight.

Chute shall be of The Pfaudler Co., of Rochester, N. Y., make.

The top section shall be provided with a 2-inch flushing ring of brass, nickel plated, to which may be connected by means of standard 2-inch bushing, the water service pipe.

The Pfaudler Co.
Rochester, N.Y.

THE EDMANDS
ELECTRIC BAKERS

Patented)

The Edmands Electric Bakers are adjustable for the application of radiant heat to any part of the body.

Edmands Heater Lamps are now made in white, amber, violet, blue and red natural glass, greatly increasing the usefulness of the apparatus.

See the Edmands Bakers at the A. M. A. and American Hospital Association Convention exhibits.

WALTER S. EDMANDS
134 Congress Street BOSTON, MASS.

CLEAN?

ABSOLUTELY

And the only dish-washing machine that can really be kept clean

THE INSINGER COMPANY :: 4600
STENTON AVENUE, PHILADELPHIA, PENNSYLVANIA

NEW GENERAL HOSPITAL, CINCINNATI, OHIO. SAMUEL HANNAFORD & SONS, ARCHITECTS

THORP FIRE PROOF DOORS

MAKE EACH ROOM A SEPARATE BUILDING

STAIRWAYS should always be protected. Whatever you do, protect the passages from floor to floor. The illustration shows the Thorp way of perfect protection, without reducing light area or ventilation.

This is a visible evidence of the care taken to protect the patient, and immediately instils confidence in the other functions of the hospital. Thorp doors and frames are fire proof, attractive, economical, clean and sanitary. "Thorp doors are designed to keep the fire confined."

THORP FIRE PROOF DOOR CO.

MINNEAPOLIS, MINN.

To Avoid "Milk Infection"

—the dangers of which are so largely increased as hot weather comes on—it is becoming more and more evident that fresh or raw cows' milk must be withheld from the diet of infants denied breast feeding. The reasons are obvious, for critical observers have shown conclusively that in spite of the utmost care, fresh cows' milk is never entirely free from some degree of bacterial contamination.

The only practical solution of the problem, therefore, is the use of a germ-free food, such as

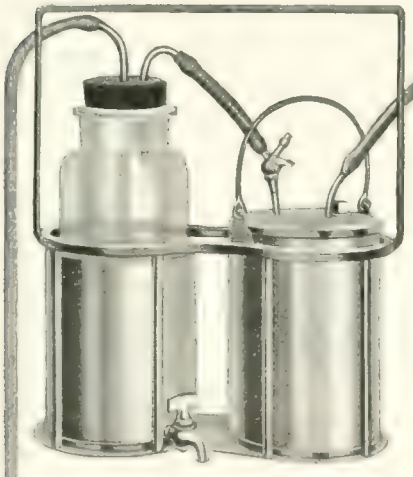
Nestlé's Food

a concentrated, highly nutritious milk powder that does not require the addition of fresh cows' milk, but simply the right amount of water and boiling for one minute to provide **a complete, perfectly balanced and absolutely sterile food.**

The especial value of Nestlé's Food for hot weather feeding has long been known, and its routine use when mothers' milk is not available not only assures proper nutrition and growth of the infant body, but also gratifying freedom from the summer digestive disturbances that every year cause the loss of so many infants.

SAMPLES ON REQUEST

NESTLÉ'S FOOD COMPANY
233 BROADWAY, NEW YORK



Warm Ether Apparatus
(Caine)

CONVENIENT—SAFE—RAPID—INEXPENSIVE

Delivers a Uniformly Regulated Warm Flow of Vaporized Ether

Produces quiet anesthesia rapidly. Entire absence of cyanosis. Operated by foot pump, leaving the hands of the anesthetist free for manipulation and to assist the operator.

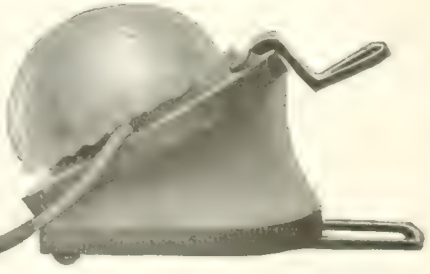
Preferred method of anesthesia in oropharyngeal surgery, as the mouth-piece hangs in the corner of the mouth, retracts the cheek, draws the chin forward, and the face is not covered.

The *practical method* for GENERAL WORK with the addition of a Gwathmey mask. Every hospital should have the complete outfit.

Decreases Dangers of Overdosage—Minimizes Deleterious After-effects

Nothing about the *Caine Apparatus* to get out of order. Simple in construction and inexpensive to operate. Wearable parts easily replaced at slight cost. It effects a saving in ether of one-fourth to one-third. Always ready for immediate use.

Illustrative descriptive circular on request



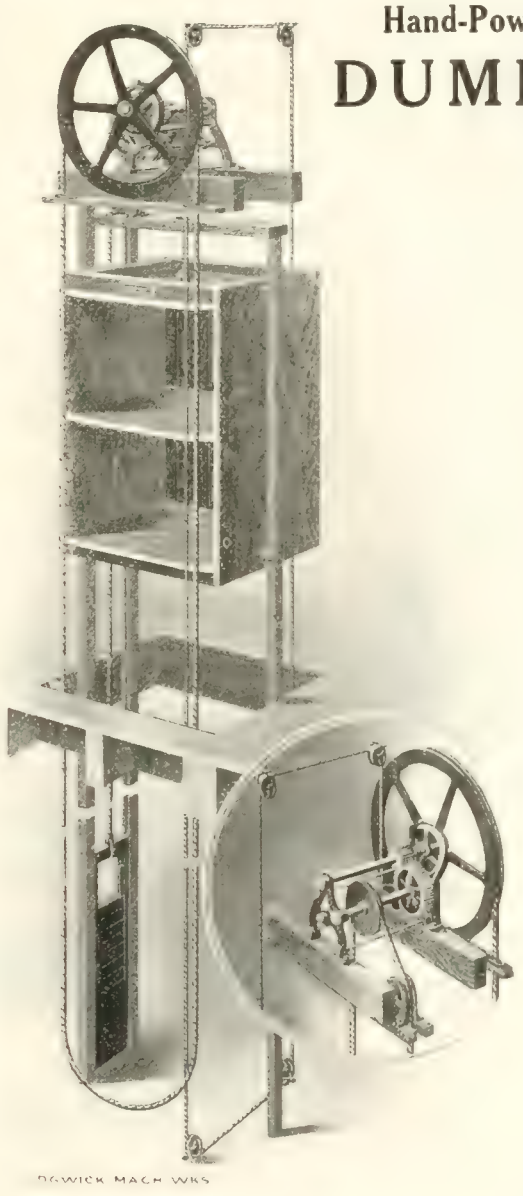
The McDermott Surgical Instrument Co., Ltd.

Sole Licensed Manufacturers

734-738 Poydras Street **New Orleans, La.**

Hand-Power vs. Power-Operated

DUMBWAITERS



This is a **Sedgwick** Geared Hand-Power Dumbwaiter Outfit, designed to handle loads up to 200 lbs. By altering the proportions of the gears, we can make this a very rapid-running dumbwaiter for light loads or a very easy-running dumbwaiter for heavy loads. The **Sedgwick** Geared Dumbwaiter is especially desirable for hospitals where the loads probably run over 25 lbs. We make shipment of catalog sizes the day the order is received. Stock cars are of selected ash, but we can furnish steel cars on order at extra cost.

In hospital equipment there is a place for both hand-power and power-operated (electric) dumbwaiters. The question before architect, builder and hospital authorities is, "Which is best for this job?"

The electric dumbwaiter costs much more than the best hand-power equipment; it requires regular, frequent and expert attention; power and upkeep costs have to be charged against it. **These are facts.**

If the question of cost is unimportant, possibly an electric dumbwaiter will meet your needs. **But**—if the only current available is single-phase alternating, **don't buy trouble.**

The **high-grade** hand-power dumbwaiter **built by specialists** costs less to install and nothing to operate. It needs no expert care—its upkeep costs are negligible. It is never out of order. It runs smoothly, silently, easily—it is always ready.

A **high-grade** hand-power dumbwaiter will do all that any electric dumbwaiter will do, **at less cost.** And **in the majority of cases it is to be preferred to an electric outfit.**

The essential thing is to know, to specify and to demand a **high-grade, guaranteed dumbwaiter built by hand-power specialists with a reputation** for "making good."

Sedgwick hand-power specialization and experience cover more than 20 years. **Sedgwick** outfits numbering more than 50,000 have been installed with entire satisfaction. **Sedgwick** Dumbwaiter machines carry a 5-year guarantee. **Sedgwick** Service assures you securing a dumbwaiter outfit that is **exactly right.**

Consult us on your Dumbwaiter problem. We will help you reach the right solution.

Write for our Catalog and our new book, "Dumbwaiters and Elevators in Modern Architectural Practice."

SEDGWICK MACHINE WORKS

218 LIBERTY STREET
NEW YORK

If it isn't

WATTERS
CATGUT

it isn't

CHLOROFORM
CATGUT

CHOOSE BETWEEN
THE ORIGINAL
—and SAFETY
THE IMITATION
—and EXPERIMENT

WATTERS CATGUT
10 YEARS ON THE MARKET

USE
WATTERS CATGUT

The *first Chloroform Catgut* placed on the market when every one else was using alcohol to preserve the gut.

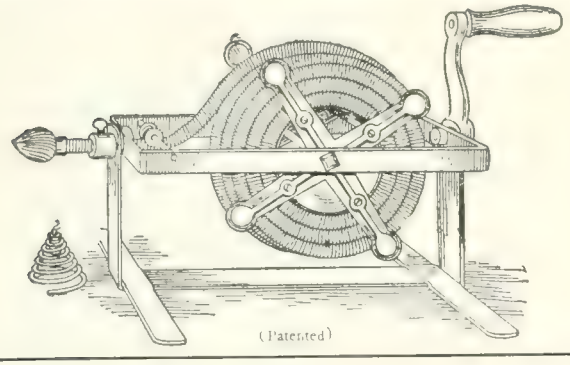
The *first Catgut* which fulfilled *all* the requirements of modern research.

The *Catgut* which set a new standard for *tensile strength.*

Order a gross of tubes and see *how* complete Catgut satisfaction is obtained.

$2.50 PER DOZEN
Discount on gross lots

THE WATTERS LABORATORIES
55 Fifth Avenue, NEW YORK


(Patented)

PLUMBING INSURANCE
FOR YOUR HOSPITAL

You can avoid all trouble and expense due to stuffed waste and sewer pipes by installing one of our

WRIGLEY PATENT
DRAIN PIPE CLEANERS
OVER 100,000 IN DAILY USE
Made in six sizes, from three to fifty feet
Prices range from $4.75 to $50.00
Send for a copy of our descriptive booklet

SAMUEL LEWIS
SOLE AGENT
Five Front Street NEW YORK
Write for a copy of our large illustrated catalogue

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FOR
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Chemical analyses and exhaustive comparative clinical tests have proven "M. C. W." **Ether for Anesthesia** to be **superior in every respect,** and led to its extensive use in many of the largest and foremost hospitals in this country and Canada.

We solicit inquiries from superintendents of hospitals, surgeons, and anesthetists interested in securing an Ether always uniform and of superior purity at moderate cost.

Mallinckrodt Chemical Works
ST. LOUIS NEW YORK

A Temporary Diet for Infants in Summer Diarrhea

Mellin's Food
4 level tablespoonfuls

Water (boiled, then cooled)
16 fluidounces

Each ounce of this mixture has a food value of 6.2 calories—affording sufficient nourishment and in a form readily assimilable.

A Chance to Make a Saving—

Send for our prices on

Absorbent Cotton
Tax-Free Alcohol
Clinical Thermometers
Gauzes, Safety
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WOODS HOSPITAL SUPPLY CO.
WOODS & SIELAFF, Proprietors
180 North Market Street, Chicago, Illinois

Fire Protection In Hospitals

Much has been said and written of the best means of fire protection in hospitals and other institutions. No means has yet been devised, however, which makes possible such easy and quick exit of large numbers of people from a building in danger of fire as the Kirker-Bender Fire Escape.

This fire escape consists of a smooth spiral slide enclosed in a steel cylinder six feet in diameter constructed alongside the building with exit connections at all floors.

In making escape, you do not have the precarious and dangerous footing of the old-fashioned step fire escape to contend with; you simply sit down and *slide*.

A prominent St. Louis hospital superintendent said: "I feel that, should the occasion ever demand it, I could with perfect safety place my sickest patient in one of these fire escapes without any serious consequence."

The Kirker-Bender Fire Escape is built by Dow Wire and Iron Works, of Louisville, Ky.

A SUMMER FOOD

A specially stable form of milk for summer use in Hospitals and Red Cross equipment is

GAIL BORDEN EAGLE BRAND CONDENSED MILK

In hot weather it has a great advantage over dairy milk, as it does not require to be stored in the ice box, and nurses and attendants can with a little forethought provide against the danger of contamination. Ordinary cleanliness in handling is alone sufficient. In this way large quantities of

Gail Borden
EAGLE
BRAND
CONDENSED
MILK
THE ORIGINAL

can be kept for the use of patients during the summer months with an immense saving of time and money as well as benefit to the sick, for it is far safer to rely upon a standard, unchanging form of milk, such as—Gail Borden Eagle Brand Condensed Milk—than to run the risk of administering milk which has been kept in kitchens and wards under unfavorable conditions.

HOT WEATHER DOES NOT AFFECT IT—IT POSSESSES A WIDE RANGE OF USES

Write today for Samples, Analysis, Feeding Charts in any language; also our 50-page book, "Baby's Welfare."

BORDEN'S CONDENSED MILK CO.

"Leaders of Quality"

Established 1857 New York

Fuel for the Human Engine

By being real industrious a man can easily dig his grave with his teeth in a few years. It falls to the lot of the Doctor and Nurse to rebuild the body that has been wrecked by dietetic follies. A perfect food for the human engine is one that supplies the proper amount of tissue-building material in a digestible form. All the requirements of the perfect food are found in

Shredded Wheat

It contains all the tissue-forming, brain-building material in the whole wheat grain, steam-cooked, shredded and baked. It also contains the bran-coat of the whole wheat grain, which performs the useful function of promoting natural bowel movement. Samples furnished free on request to any physician, nurse or hospital superintendent.

"IT'S ALL IN THE SHREDS"

Made only by

The Shredded Wheat Company

Niagara Falls, N. Y.

Killing Flies Wholesale

BORAX is what does it. Recent experiments of the United States Department of Agriculture have demonstrated this definitely.

TWO OUNCES OF 20 MULE TEAM BORAX

applied to the garbage can, or ten ounces applied to eight bushels of fresh manure, will accomplish this.

It is a pure, trustworthy product, put up conveniently and sold cheaply by

PACIFIC COAST BORAX CO.
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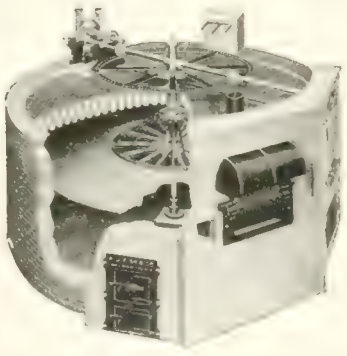
The Fish Rotary Oven



is made either of brick or of heavy sheet steel packed with heat-retaining material. The steel oven is, of course, portable.

The Fish Rotary Oven makes the problem of feeding a multitude almost as easy as feeding half a dozen. It has great capacity, takes all kinds of goods, and saves fuel, time, space and repairs. Any fuel may be used.

We have recently installed Fish Ovens for:

City Hospital, Cleveland, Ohio.
Carlisle Indian School, Carlisle, Pa.
State Hospital, Kankakee, Ills.
State Hospital, Milwaukee, Wis.
State Hospital, Anoka, Minn.
State Penitentiary, Stillwater, Minn.
Federal Penitentiary, Leavenworth, Kans.
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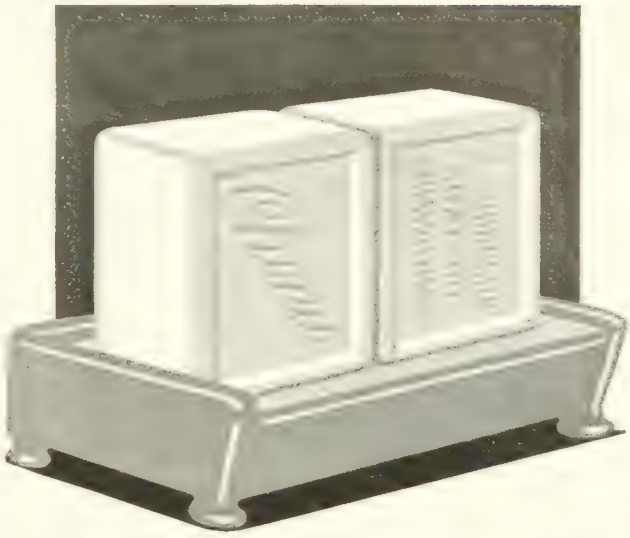

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A Combination That Invites Consideration of

JOHNSON'S China Soap

The problem of private room soap is very successfully solved with a trial order of JOHNSON'S CHINA SOAP. It combines the quality that usually can only be secured in toilet soaps of far higher price, with a *price* that makes its use a decided economy.

Users say that CHINA SOAP is the most satisfactory of all the white floating soaps on the market. The high percentage of cocoanut oil results in splendid lathering qualities, together with wonderful smoothness. Most people want bath soap that floats, another advantage.

Your patients, as well as resident physicians and the nurses' staff, will appreciate a regular supply of CHINA SOAP for personal use. You will appreciate the low price, extraordinary considering quality.

This price is given in our *Industrial* and *Institutional Catalog*. If you haven't a copy on file, write us, as this is a valuable reference document for Institutional superintendents and buyers. Address

B. J. Johnson Soap Company, Inc.
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DAHLSTROM Hollow Metal Doors, Frames and Trim, will make your building fire-proof and fire-safe and free from the possibility of panic which may be no less serious than fire in its effects on persons at a low ebb of vitality.

Ideal sanitary conditions are attained with Dahlstrom Doors; vermin and germs cannot lodge or thrive on steel as on wood. All offsets and mouldings for hospitals are rounded and smooth; the baked enamel finish is non-absorbent, and the work is easily kept in a sanitary condition.

Write us for a free copy of our new booklet, "Safety First for Hospitals"

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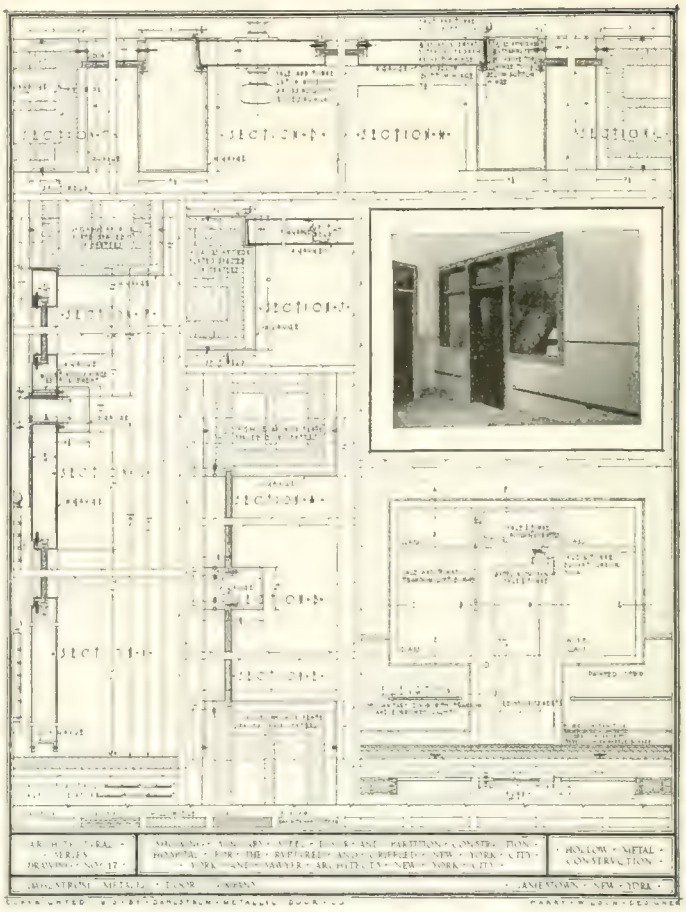

Information on Markets for Hospital Buyers

WOULD it not be advantageous for you to be on terms of perfect confidence with some one who was ***in touch with the markets of the world*** and who would keep you posted about what to buy, when to buy it, and how much to lay in of the food products that go to make up one-third of your annual expenses of operation?

We have people in our employ who do nothing else but study markets, watch prices and quality of food products, the acreage planted to each, conditions of crops and character and quality of goods each year. If there is to be a shortage, we know about it first. If there is a "good buy" at any special time we pounce on it.

If you will let us, we will study your wants, keep you posted and help you plan for the best interests of your patients and your pocketbook.

Write to us about it and let us be your confidential buyer in the world's markets. Even if your hospital is small, we can and will save you a lot of money.

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The standard washable dull finish oil paint

Is used in the

Hospital Ward and Hospital Room

Designed by Dr John A. Hornsby

As an exhibit of the Simmons Mfg. Co.

TO TYPIFY AN IDEAL HOSPITAL INTERIOR

This exhibit can be seen at 1347 Michigan Avenue
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SPECIFY PATEK'S EGSHELCOTE

And make your interior walls

BEAUTIFUL, SANITARY AND WASHABLE

Used nationally in hospitals with satisfactory results. Made in approved hospital colors. Write for free trial quantity and color chart.

PATEK BROTHERS *Sole Makers* **MILWAUKEE**

Ask for it by name–

and thus avoid substitution

Horlick's

THE ORIGINAL MALTED MILK

SOLMIDES

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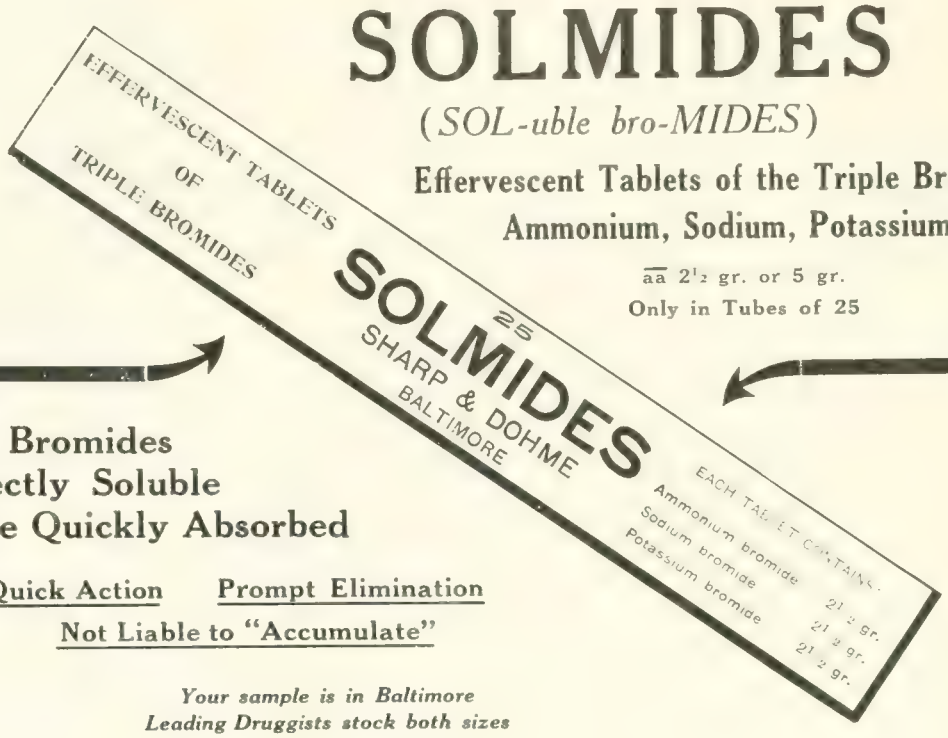
Effervescent Tablets of the Triple Bromides
Ammonium, Sodium, Potassium

$\overline{aa}$ 2½ gr. or 5 gr.
Only in Tubes of 25



Pure Bromides
Perfectly Soluble
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Quick Action Prompt Elimination
Not Liable to "Accumulate"

Your sample is in Baltimore
Leading Druggists stock both sizes

Elbow Type – For Clinic Lavatory

Niedecken Mixer

Patented

The Perfect Mixing
AND
Anti-Scalding Valve

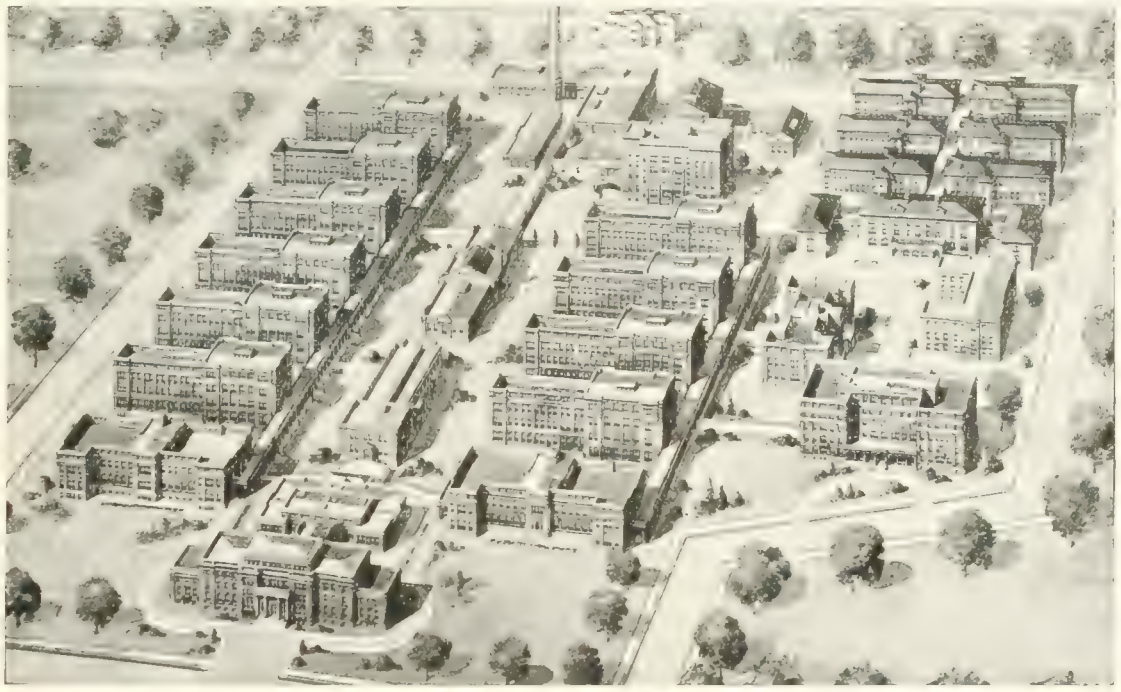
For Shower, Lavatory
Bath, Shampoo, Etc.

No Cams No Springs

Removable
Bronze Seats

Hoffmann & Billings
Manufacturing Company
MILWAUKEE, WISCONSIN

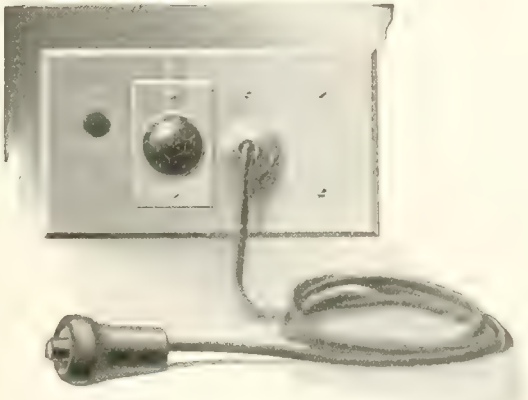
Write For Bulletin M H 5



CINCINNATI GENERAL HOSPITAL, CINCINNATI, OHIO. 515 Bryant Silent Call Stations installed.

Architects, Samuel Hannaford & Sons, Cincinnati, Ohio.
Electrical Engineer, George Wright, Cincinnati, Ohio
Electrical Contractors, Wm. A. Corrao Electric Co., St. Louis, Mo.

Over 500 Silent Call Stations Were Installed in This Institution



Typical Calling Station of the Bryant Silent Call System.
Calling Stations may be limited to the patient's bed-push and control switch, or may also include bull's-eye and one or more outlets for reading lamps, warming pads, etc., as shown.

THE BRYANT SILENT CALL SYSTEM

is the logical system for hospitals. It embodies every practical refinement that makes for convenience, reliability and safety of operation. It is so designed as to permit of installation in buildings already erected, without requiring alteration of existing wiring systems, and without entailing excessive expense of installation.

Let our nearest office send you complete details.

THE BRYANT ELECTRIC COMPANY

BRIDGEPORT, CONN.

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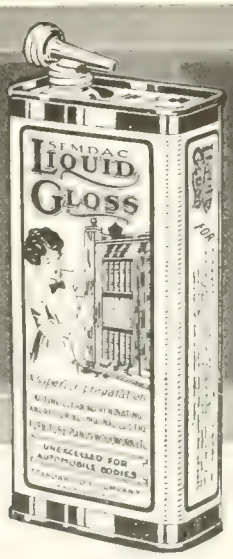
SEMDAC



The Scientific Cleanser

Its usefulness begins with dusting—and never ends. The value of SEMDAC in hospitals and institutions of every character cannot be over-estimated. It improves sanitary conditions and saves drudgery and time for nurses and other attendants.

SEMDAC cleans enamel beds and fixtures, thoroughly and expeditiously, removing spots and discolorations and preserving finish and lustre.

It keeps furniture, pianos, all woodwork and hardwood floors brilliantly polished, erasing mars and scratches.

Use SEMDAC for cleaning windows and mirrors, and for linoleum. Supply it in the stable and garage for polishing automobile and ambulance bodies after washing.

Whenever and wherever there is cleaning to be done, the work can be done better, quicker and more efficiently with the aid of SEMDAC.

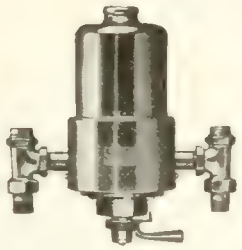
It cleans thoroughly, gathers up dust, and polishes, all in the same operation.

SEMDAC comes in lithographed cans, fitted with a convenient spout, also in barrels and half barrels. It will not discolor nor become rancid, is economical in use.

Standard Floor Dressing

is a companion product to SEMDAC. It also is especially adapted for hospital and sanatorium use and keeps wooden floors clean and in good order. Economical and thoroughly satisfactory, this product, like SEMDAC, is guaranteed by its makers and may be obtained from any reputable dealer or from any of the branch stations of the

STANDARD OIL COMPANY
(INDIANA)
Chicago, U. S. A.



Filling a Hydrotherapeutic Prescription

APPLIED to the continuous flowing bath the POWERS THERMOSTATIC HOT WATER CONTROLLER makes it possible to fill the doctor's prescription with accuracy. The controller is easily adjusted to the temperature desired, and maintains this temperature regardless of varying pressures or temperatures in water supplies. Failure of the cold water supply automatically shuts off the hot, thereby making scalding an impossibility.

The controller is adaptable to all installations; may be set in table, or locked in a wall recess, or exposed with adjusting handle, as desired. It can be installed by any plumber.

The Powers Regulator Company

103 Park Avenue NEW YORK — **5 S. Wabash Ave.** CHICAGO

Manufacturers of temperature controlling apparatus

Sterile Beds and Safety

WITH

Royal Archer

The Perfect Rubber Sheeting

The success of your hospital demands that every accessory be **aseptic.** Why use sterile linen over an ordinary, sticky, smelly, germ-breeding rubber sheet with its low degree of service?

Insist on Royal Archer! STERILIZE it—in your steam sterilizer; in boiling water; in acid or bichloride, hot or cold. It protects the patient—and the mattress.

Its dense, resilient coating has no pores for the accumulation of filth—no hiding place for germs.

Its extra-strong cotton fabric is **impregnated** with rubber, not merely coated—hence it will not peel, harden, crack, or get sticky.

ONE FULL YEAR OF SERVICE GUARANTEED

Acid-proof — Leak-proof — Blood-proof — Urine-proof—Wear-proof. Easy to clean. Does not wrinkle.

Order TODAY from your nearest dealer.

Free samples and a copy of our guarantee. A postal will do.

ARCHER RUBBER COMPANY

Acknowledged Specialists

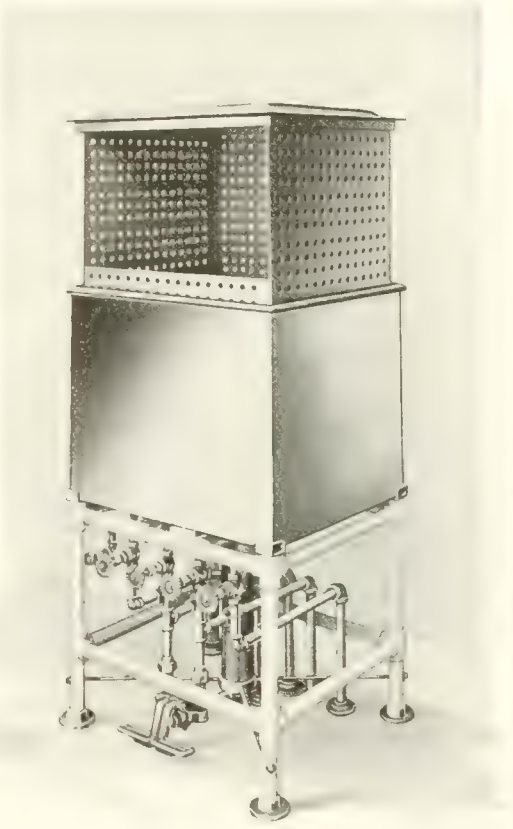
MILFORD, MASS.

Canadian Agents — Ingram & Bell, Toronto

Modern Sterilizers

CHAPTER VI

DISH STERILIZERS



THE special new tray used on Castle Dish Sterilizers facilitates the rapid handling of quantities of dishes of all kinds with no breakage, and with little labor. The high walls support the cover and hold the dishes in, greatly increasing the useful capacity of the Sterilizer. The tray, made from heavy perforated tinned copper, rests lightly on its carrying frame, and may be freely lifted out for cleaning and other purposes.

The Castle hydraulic lift, the same as used on the Utensil Sterilizer, provides that smooth, uniform, certain movement of the loaded tray, up or down, that is especially needed where dishes are being handled. This movement is always under perfect control, by means of foot pedals attached to the stand and free from the floor. It is impossible for the lifting mechanism to spurt water into the room, and there is not a single adjustable feature on the Sterilizer. It is built for service.

This Sterilizer may be finished in polished or unpolished nickel, as desired. It makes an ideal Utensil Sterilizer for general purposes.

Write for circulars—they are interesting

Wilmot Castle Company

ROCHESTER, N. Y.

Sterilizing and Bacteriological Apparatus

RIPOLIN Enamel Paint for Sterile Cleanliness

Operating Floor, St. Anthony's Hospital, Woodhaven, L. I.
Walls, Trim, and Doors in RIPOLIN
I. E. Ditmars, Architect *M. Hallenbeck & Son, Painters*

The glossy, porcelain-like surface of Ripolin makes it ideal for use in hospitals—not the slightest lodgment for dust and bacteria. Wherever applied—kitchens, operating rooms, laundries—Ripolin is always aseptic and durable. Impervious to thermal conditions, steam vapors, and chemicals, which would quickly ruin ordinary enamels.

Hard knocks of every-day hospital life, the scrape of a wheeled chair, contact with a carelessly placed instrument cabinet, and such wear and tear leave no marks on its remarkably elastic surface.

Ripolin has an unusual covering capacity, averaging from 500 to 700 square feet per gallon, depending on the nature of the surface. Made by the old Dutch hand process, and comes in that brilliant high gloss like glass, in a beautiful egg-shell finish, or absolutely flat.

Any tint desired may be obtained by mixing pure color ground in Japan with white Ripolin. Ideal for decorative purposes in halls, bedrooms, or corridors.

Write for a booklet giving names and illustrations of notable hospitals painted with Ripolin. Let us send also that strip of Ripolin coated tin so that you can test it for yourself.

Send for this strip of tin coated with RIPOLIN. Bend it, twist it—you cannot crack or flake the enamel.

J. A. & W. BIRD & CO.

Importers and Distributers of RIPOLIN for the U. S. and Canada

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NEW YORK

655-A People's Gas Bldg.
CHICAGO

Everything in white enameled steel furniture for hospital and surgeon

- Two ward or private-room necessities in one.
- Porcelain enameled top 16x20 inches.
- Cabinet of steel.
- Wood slide for feeding patients.

$18.00
(subject to discount)

No. 168

ASEPTIC FURNITURE MFG. CO.
(INCORPORATED)

1530-32 First Avenue, South Seattle, Wash.

Velvetile
Composition Flooring

Best for Hospitals and all buildings requiring floors that are

Sanitary
Fire-proof
Quiet
Comfortable
Resilient

Velvetile can be laid on either wood or concrete subfloor.

We offer a wide selection of time-tested colors that do not fade.

American Magnesia Products Co.

600 West Austin Avenue
CHICAGO

We Invite Physicians, Nurses and Managers of Hospitals

to visit our Chicago Sales Building at 1347 Michigan Avenue and inspect the largest exhibit of Hospital Beds ever shown by a single metal bed manufacturer. Now on permanent display.

We are showing here the new, light weight Simmons Cold-Rolled Burnished Steel Beds which have excited so much interest for hospital use. This bed of feather-weight lightness, with large tubing, of handsome appearance and glass-like, highly sanitary finish, is absolutely the last word in hospital bed construction.

The display also includes a model hospital room and hospital ward especially planned for us by Dr. John A. Hornsby, Editor-in-Chief of The Modern Hospital and designer of many of the leading hospitals of America. These rooms will afford many suggestions to the medical and nursing professions and to hospital managers.

SIMMONS MANUFACTURING COMPANY

THE SIMMONS MANUFACTURING CO. 1/3 YOUR LIFE IS SPENT IN BED TRADE MARK

Executive Offices and Factories—Kenosha, Wis
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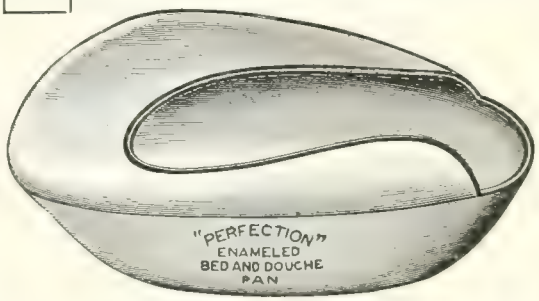
Denver	Portland, Ore.	San Francisco	Seattle	Los Angeles

The Verdict of Over 2000 Hospitals in the U.S. stands behind the PERFECTION as the Only Successful Effort ever made to Cope with a Vital Nursing Problem

More Discomfort is Caused to Patients by the Use of Old-Fashioned Bed Pans than by Anything Else

THE MODERN HOSPITAL—a book just published by W. B. Saunders Co., and written by Dr John A Hornsby, Late Superintendent of the Michael Reese Hospital, Chicago, and R. E. Schmidt, Architect, contains the following extracts:



Patented June 5, 1900 and May 4, 1909

"Bed Pans have been a problem ever since the days of the old yellow earthenware shovel-shaped Bed Pans of our Grandfathers. There is only one made that justifies mention, and that is the 'Perfection' Bed Pan."

"Its chief point of advantage is the ease with which patients are accommodated upon it, whether they lie down or are in a reclining position. Then again the contents do not spill readily, it cleans easily, and is carried from place to place with facility."

This Opinion is shared by over 2000 Hospitals in the United States and Hundreds of Hospitals in Great Britain and her Colonies, where actual use has proved that the Meinecke "Perfection" is the Best Pan for the Patient, for the Nurse, and the Hospital. It is shaped to fit the body, and does not press against the spine of the patient. It is quickly emptied and cleansed, thereby saving time and work for the Nurse.

The "Perfection" is also a Douche Pan as well as a Bed Pan, and is intended to be used for both purposes. The Wide Open End permits the Nurse or Doctor to reach the parts while the patient is on the Pan.

Made in White Enameled Steel Ware, Gray Enameled Steel Ware and Porcelain
Large Size for Adults. Small Size for Children

Hospitals Supplied at Wholesale Prices

MEINECKE & CO., NEW YORK
ADVANCED SPECIALTIES FOR HOSPITAL AND SICK-ROOM

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to their Medical, Surgical, and Nursing Services

Vol. V *August, 1915* No. 2

JOSEPH L. HUDSON MEMORIAL BUILDING OF HARPER HOSPITAL, DETROIT

An Exclusively Surgical Unit Intended as the First of a Complete New Group—Embodies the Best Architectural Practice of the Day in Block Type Construction—Some Unique Features

By WAYNE SMITH, M. D., Superintendent

THE Joseph L. Hudson Memorial Surgical Unit, Harper Hospital, is the first unit of a new hospital designed ultimately to replace the present hospital buildings, which were erected about 1888. This unit, as its name implies, is planned exclusively for the care of surgical patients. The building extends in a north and south direction. Across the north end, like the cross on a T, is the service building, large enough to serve the estimated future capacity of 750 patients.

The surgical building is connected to the administration building, which is also the medical building, by a corridor, three stories high above the basement. It is intended to extend this corridor to reach the proposed medical building at the rear, and then the administration building will be torn down and a new one erected. This will give a general outline of an E with the service building north of the middle bar, and the out-patient, power, laundry and operating buildings still farther north.

The surgical building is directly connected by a corridor to the operating building and at present the second floor is used as a maternity department.

The buildings are of reinforced concrete floors with solid brick walls, and are faced with a brown vitreous brick. The floors throughout, except in the corridors, are terrazzo, carried up against the wall with a cove base six inches in height. The corridor floors, and a strip six feet wide through the large wards, are rubber tile, which makes a noiseless, easily replaceable floor. The tile is inset to come flush with the terrazzo border. Along the walls is a secondary projection and cove to prevent furniture from marring the walls by being pushed against them.

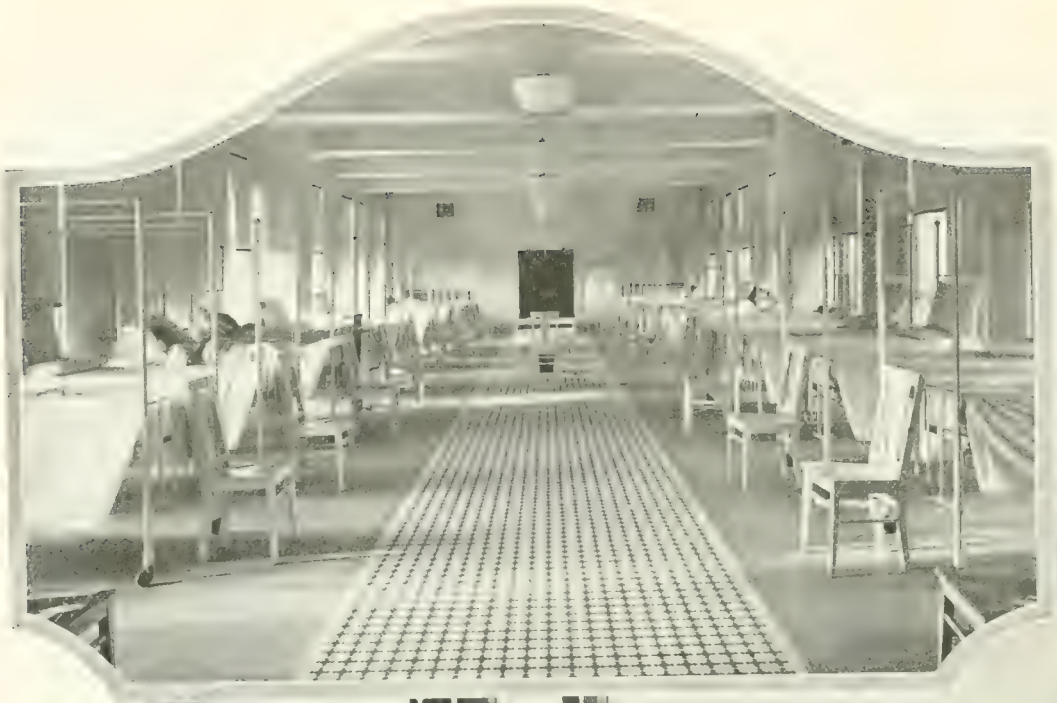
There is no wood trim anywhere, a drawn metal casing strip with a very slight radius having been substituted, which is proving itself very satisfactory. The greatest care is taken throughout not only to exclude dust-catching surfaces, but to leave no corners where dust or dirt can remain.

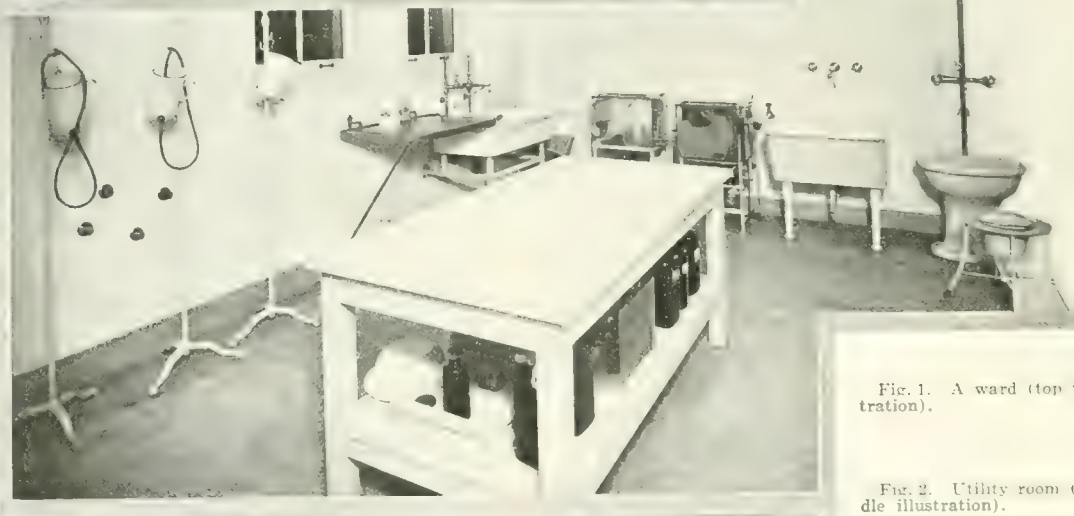
The lavatories in the patients' rooms are of special design, "Harper" lavatories, with nothing to floor, and an integral back, set in marble or vitrolite, flush with the wall.

The utility, preparation, toilet and bath and dressing rooms have vitrolite glass wainscoting set on the terrazzo base and flush with it and with the plaster above. The stall partitions are made of the same material. There are no pipes visible in the entire building except in the basement where the mains and branches are run exposed on the ceiling in part, though the larger part of these are run in a sub-basement. The radiators are entirely wall-hung and the supplies and returns are run in wall chases.

The heating system is a modified plenum system with supply of washed air at desired temperature to private rooms and wards and an exhaust from each room. The radiators are equipped with modulating valves which permit the heat to be regulated for each room independently.

The Hudson unit is 196 feet long by 47 feet wide, six stories and a basement; and the service





Joseph L. Hudson Memorial Building, Harper Hospital, Detroit, Mich.

Fig. 1. A ward (top illustration).

Fig. 2. Utility room (middle illustration).

Fig. 3. Dressings room taken at night by indirect light (bottom illustration).

Fig. 4. Joseph L. Hudson Memorial Building, Harper Hospital, Detroit, Mich.

building is 149 feet by 57 feet and one story and a basement. The basement is eleven feet clear height and five feet below ground level, and is consequently very well lighted and can be used for every purpose except patients' rooms.

The capacity of the building is 186 patients, 66 in private wards and 120 in wards of four or more beds; and it is sanitary, fireproof and as nearly noiseless as can be made.

The service building contains the kitchen, store rooms, bakery, help's dining rooms, special diet and diet training kitchen in the basement; and the nurses', staff and superintendent's dining rooms on the first floor, and along the corridor toward the administration building the superintendent's and assistant superintendent's offices, and visiting doctors' rooms.

In the surgical building the first three floors are private rooms, and the top three floors are wards, with one large ward of twenty-four beds and three four-bed wards.

Each floor has a dressing room, preparation, nurses', utility and serving rooms, and on the south end is a large solarium.

The ward floors are equipped with small laboratories and the private room floors with flower rooms, a feature unique in this hospital.

The airing balconies have been very carefully considered and there are balconies or arcades on the first, third and fourth floors, and a large roof garden with elevator and kitchen service. This roof garden is protected by a canvas cover so that patients can remain there except during the most severe storms. The balconies on the fourth floor open directly from the wards through triple sash windows to the floor, wide enough to allow the passage of a bed.

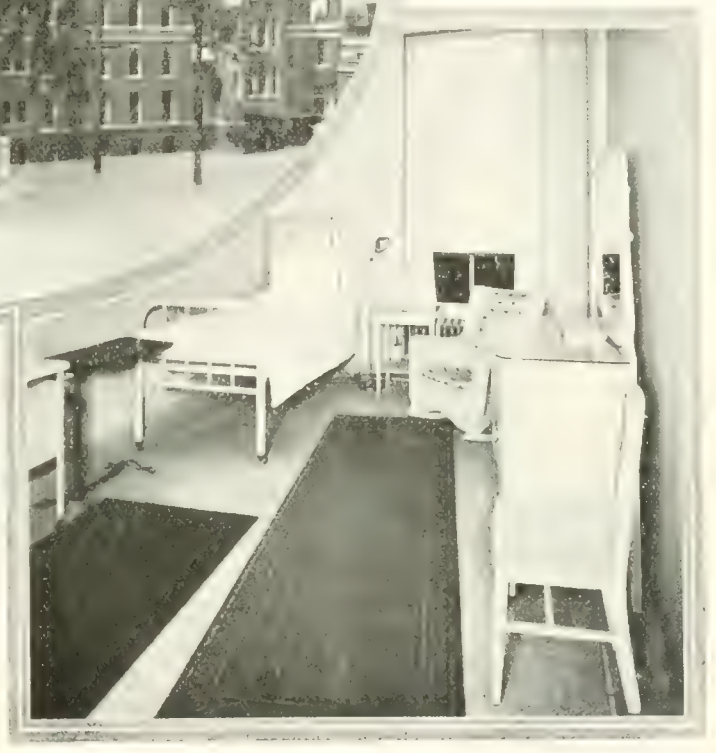


Fig. 5. Joseph L. Hudson Memorial Building. A private room.

The nurses' room contains the medicine cabinet and sink, and the wall next to the corridor has a glass panel below which is the signal box for the light signal system, so that the nurse on duty, looking at the signals, has command of all who pass through the corridor. The utility and serving rooms are opposite each other in the center of the building, and they are cut off from the south half of the hospital by a pair of doors in a glass partition, and the serving room has a small subcorridor for service, to eliminate entirely the noise of dishes, conversation among nurses, etc. The whole idea, in fact, is to have as noiseless a hospital as possible; to this end also elevators and stairs are isolated from the corridors, double gyp-

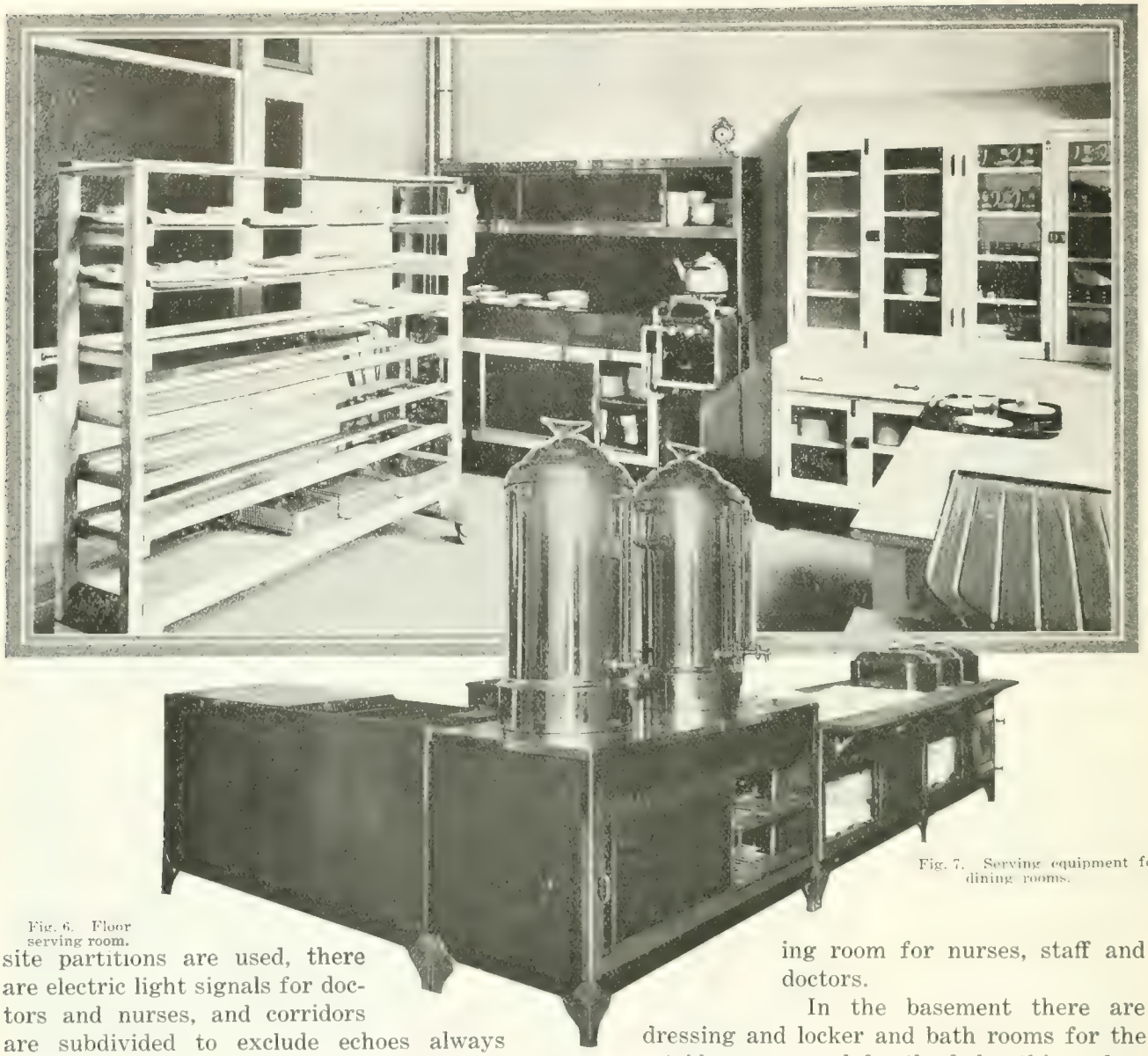


Fig. 6. Floor serving room.

Fig. 7. Serving equipment for dining rooms.

site partitions are used, there are electric light signals for doctors and nurses, and corridors are subdivided to exclude echoes always found in a long corridor with smooth walls.

The entire equipment is as complete and as efficient as possible. The kitchen is equipped with all manner of electrically driven bread cutters, vegetable peelers, coffee grinders, etc., and the most advanced methods in mechanical operation have been followed.

The telephone system is most complete, comprising as it does an intercommunicating system for the hospital, and a city connection from each private room and from the kitchen, bakery, store room, laboratories and nurses' rooms. The building is equipped with an incinerator and a vacuum cleaning apparatus, and the refrigerators are cooled by brine circulation, the machine having a capacity of 25 tons per day.

There are two dumbwaiters, of the electric push-button type, from the basement serving room to the ward serving rooms on all floors and the roof, and also from the kitchen to the serving room for nurses, staff and doctors.

In the basement there are dressing and locker and bath rooms for the outside nurses and for the help; this makes it very convenient for the nurses and help to come in, bathe, change to their uniforms or working clothes, and reverse the process when leaving. The help are also given separate dining and serving rooms in the basement, the arrangements for their comfort being very complete.

The following is a more detailed description of the equipment on each floor of the building. One must keep in mind, however, that this is an exclusively surgical building and planned and equipped for no purpose other than the treatment of surgical cases.

On each floor one finds a head nurse's office, chart room and dispensary, a nurses' utility room with blanket and bed pan warmer; and a solution locker, built in the walls with flat surfaces and the cove base of terrazzo, leaving no space for the accumulation of dust or dirt. In this room are the utensil sterilizer, bed pan washer and ster-

Fig. 8. The kitchen (top illustration).

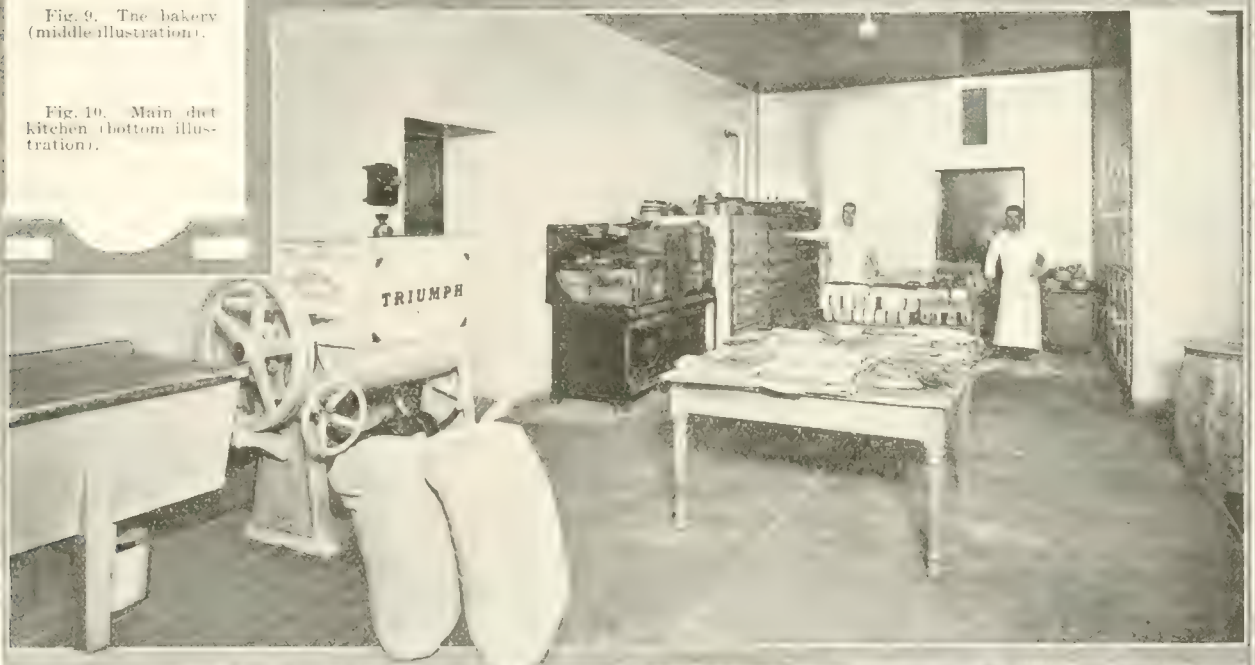
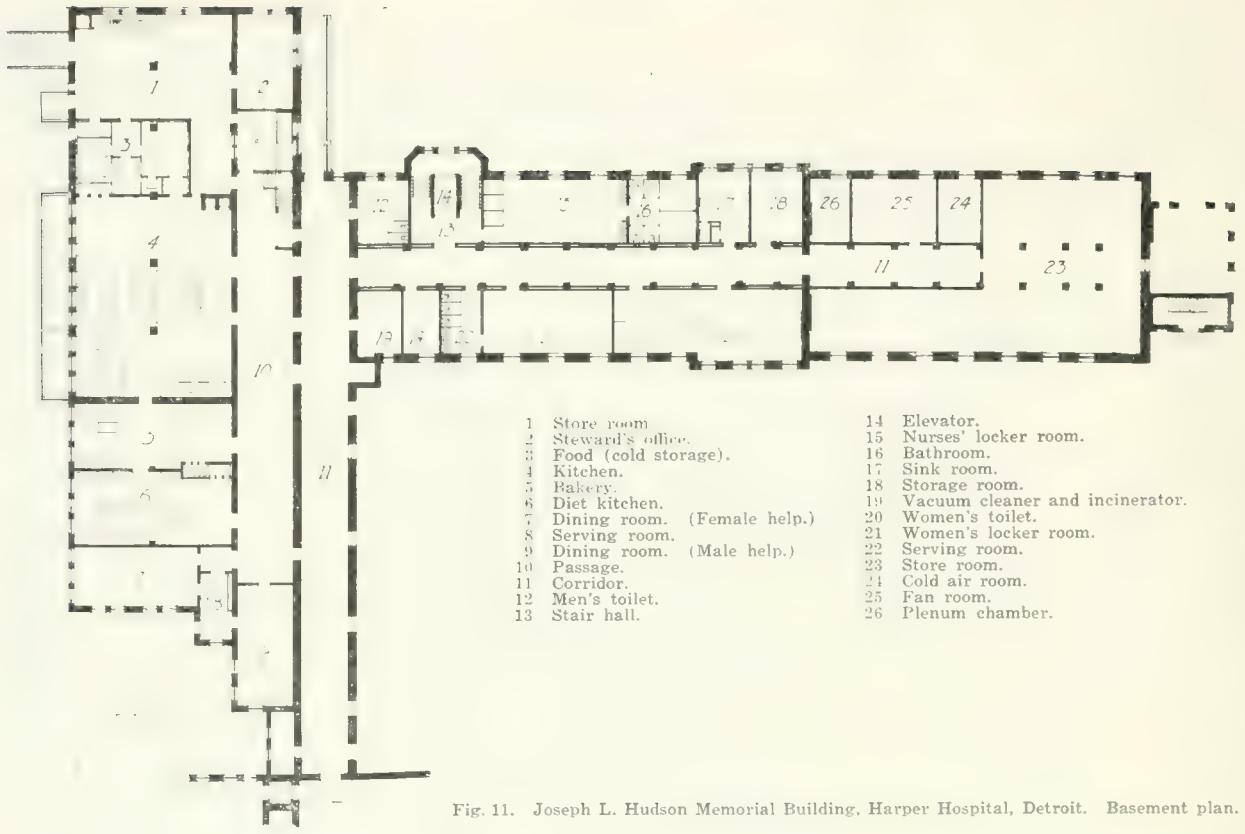


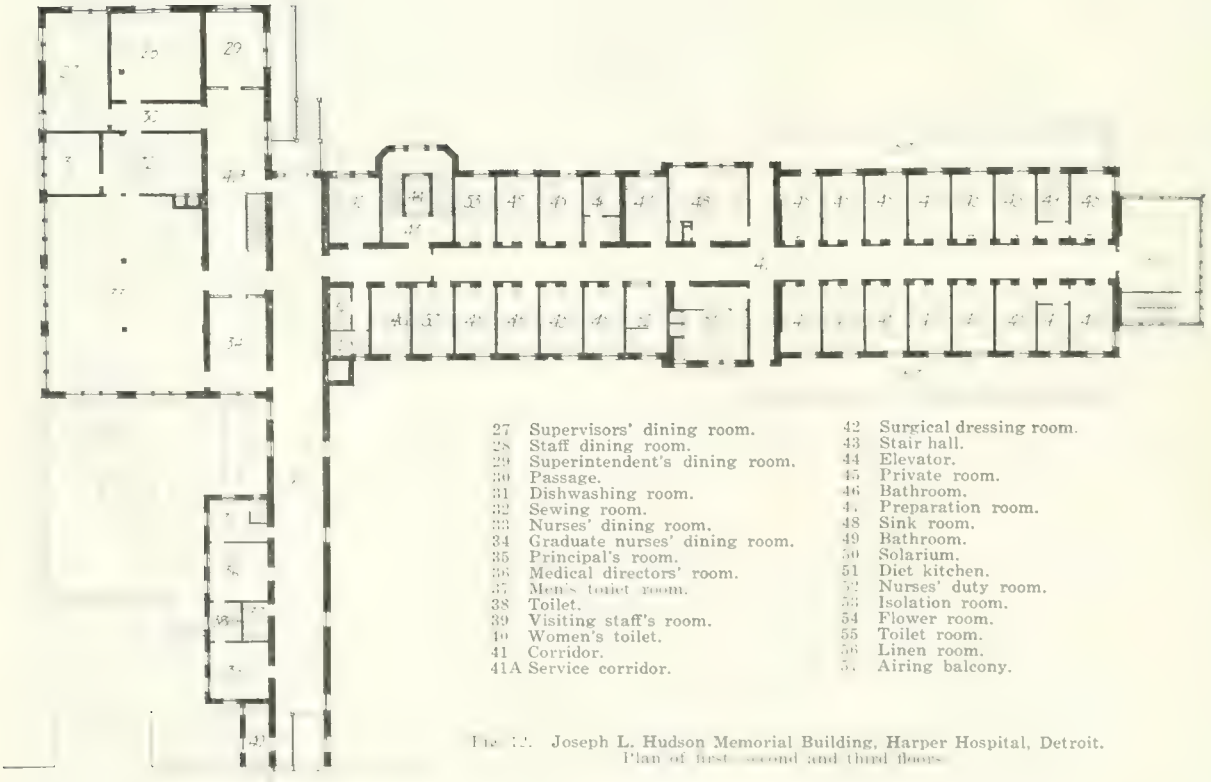
Fig. 9. The bakery (middle illustration).

Fig. 10. Main diet kitchen (bottom illustration).



1 Store room
2 Steward's office.
3 Food (cold storage).
4 Kitchen.
5 Bakery.
6 Diet kitchen.
7 Dining room. (Female help.)
8 Serving room.
9 Dining room. (Male help.)
10 Passage.
11 Corridor.
12 Men's toilet.
13 Stair hall.
14 Elevator.
15 Nurses' locker room.
16 Bathroom.
17 Sink room.
18 Storage room.
19 Vacuum cleaner and incinerator.
20 Women's toilet.
21 Women's locker room.
22 Serving room.
23 Store room.
24 Cold air room.
25 Fan room.
26 Plenum chamber.

Fig. 11. Joseph L. Hudson Memorial Building, Harper Hospital, Detroit. Basement plan.



27 Supervisors' dining room.
28 Staff dining room.
29 Superintendent's dining room.
30 Passage.
31 Dishwashing room.
32 Sewing room.
33 Nurses' dining room.
34 Graduate nurses' dining room.
35 Principal's room.
36 Medical directors' room.
37 Men's toilet room.
38 Toilet.
39 Visiting staff's room.
40 Women's toilet.
41 Corridor.
41A Service corridor.
42 Surgical dressing room.
43 Stair hall.
44 Elevator.
45 Private room.
46 Bathroom.
47 Preparation room.
48 Sink room.
49 Bathroom.
50 Solarium.
51 Diet kitchen.
52 Nurses' duty room.
53 Isolation room.
54 Flower room.
55 Toilet room.
56 Linen room.
57 Airing balcony.

Fig. 12. Joseph L. Hudson Memorial Building, Harper Hospital, Detroit.
Plan of first, second and third floors.

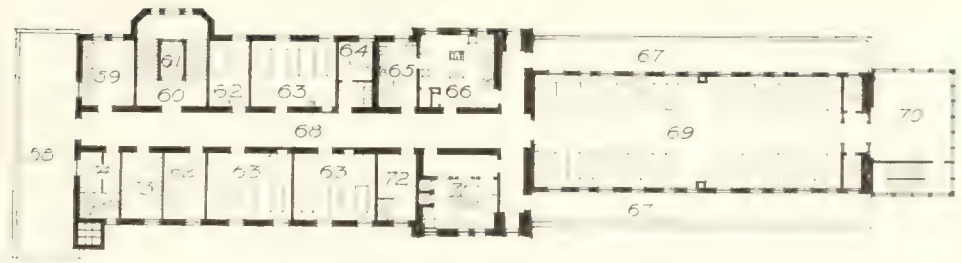


Fig. 13. Joseph L. Hudson Memorial Building, Harper Hospital, Detroit. Plan of fourth, fifth and sixth floors.

58 Airing gallery.
59 Surgical dressing room.
60 Stair hall.
61 Elevator.
62 Isolation room.
63 Three-bed ward.
64 Toilet and bathroom.
65 Preparation room.
66 Sink room.
67 Airing balcony.
68 Corridor.
69 Twenty-two-bed ward.
70 Solarium.
71 Diet kitchen.
72 Nurses' duty room.
73 Locker room
74 Linen room.
75 Toilet room.

ilizer, gas plate, slop hopper and sink. The walls from the cove base up are of vitrolite panels to a height of seven feet.

In the preparation room is the sitz bath, also a large porcelain vitreous tub set on cove base of terrazzo, easily accessible on all sides, with a large intake of hot and cold water, a "Harper" lavatory and the toilet. The next room is finished in the same way with bath and toilets. At the north end is the dressing room, with surgeons' sink, hopper, instrument sterilizer, utensil sterilizer and water sterilizers, operating table, etc. Just across is the linen closet and nurses' toilet.

All six floors are furnished exactly the same, with the exception of the ward floors, which have the addition of a laboratory, with all the latest equipment for laboratory work.

On the ward floors there are two toilet rooms for ward use, opening off the vestibule between the large wards and the solarium, and on the private room floors there are two suites, with private baths in the same relative position.

The architects were Malcomson and Higginbotham, of Detroit. Mr. Joseph S. Stringham, an eminent engineer, and Mr. Joseph Boyer, were the active members of the building committee, and to their untiring efforts a large share of the credit for our fine building is due.

THE ORGANIZATION OF THE DOMESTIC DEPARTMENTS OF THE STATE HOSPITAL FOR THE INSANE AT HOWARD, RHODE ISLAND[1]

Dual Board Directs Activities—Requisitions—Laundry—Sewing Room—Congregate Dining Hall—Music and Entertainment of Patients—Careful Accounts Kept in All Departments

By ARTHUR H. HARRINGTON, M. D., Medical Superintendent

THE organization of the domestic departments of the State Hospital for the Insane at Howard, Rhode Island, differs in some respects from the organization of like departments in most other hospitals for the insane. The reason for this is found in the method of administrative control of this hospital. The hospital is governed by two boards, the Board of State Charities and Corrections and the Board of Control and Supply. The former board appoints the officers of the institution, fixes all salaries and wages, and supervises, through the superintendent, its internal administration and the sociological phases of the care of its patients. The Board of Control and Supply has charge of the purchasing of all materials and supplies, and directs the repairs and construction of all buildings.

Another factor which enters into the situation is that there are located at Howard, besides the State Hospital for the Insane, the State Almshouse, the State Workhouse and House of Correction, the State Prison, the Sockanosset School for boys, which is a reform school, and the Oaklawn School for girls, also a reform school.

The respective relations of the two boards mentioned to all of these institutions are the same practically as their relations to the State Hospital.

The institutions enumerated above are all situated within an area of about one and one-half square miles.

The Board of Control and Supply maintains at Howard a general storehouse. Most staple articles are kept at this storehouse. The State Hospital draws from two days' to a week's supplies from the storehouse, which are charged up to it as drawn. The Board of Control and Supply aims to contract for six months' supplies and for some commodities for a year's supply, the quantities

[1]This is the fifth in a series of eight papers on "The Government of State Hospitals for the Insane." Last month was published "The Purchase of Supplies"; next month will appear "Occupation for Patients in State Hospitals."

contracted for being, according to the judgment of the Board, the total quantities estimated by all the heads of these institutions. It will be observed that there is thus maintained, as it were, a community system.

The Board of Control and Supply employs an officer, designated as disbursing agent. His duty is to receive all the requisitions from the heads of the institutions and to fill them from the general store, if he has the supplies on hand; if not, he forwards the requisitions to the office of the Board at the State House in Providence.

The disbursing agent, or one of his associates, delivers all supplies to the individual institutions and in person checks them off on delivery.

The State Hospital has no officer designated as steward. One reason for this is that the Board of Control and Supply and the disbursing agent perform a considerable part of the work which would naturally, under the usual organization of a large hospital for the insane, fall to such officer. The consequence is that in the organization of this hospital, the superintendent, the dietitian and housekeeper and the superintendent's clerk perform what would naturally remain of the duties of a steward. The dietitian and housekeeper thus becomes an important officer in this organization. This officer is a woman, as is quite obvious from the title. Under the direction of the superintendent she has charge of all domestic supplies after they reach the hospital and she requisitions for the same. She has charge of the service building, kitchen and bakery, of the making of dietaries, of the conduct of the congregate dining hall, of the supplying of foods to such wards as have ward dining rooms, of hiring the domestic help; and, in addition, the general oversight of the laundry.

This hospital has 1,350 patients. Aside from the main hospital plant, there is a building which is a separate unit, known as the reception hospital. This is practically a complete hospital in itself. All incoming patients are received here, there being nearly 400 admissions annually. It has beds for 40 officers and employees, comprising the physicians of the receiving service, the nurses of the same and the domestics for the building. This building has its kitchen, and, with the exception of bread, pastry and such other foods as are baked in the large ovens at the main hospital, the cooking for this unit is done in this building. The domestic work of the reception hospital is in charge of an assistant housekeeper under the dietitian and housekeeper.

REQUISITIONS

Requisitions for staple articles of food like beans, tea, sugar, flour, are called for by the Board of Control and Supply each six months, or each twelve months, as the board determines.

These are, in fact, estimates, and are made up by the superintendent. Such supplies are usually delivered at the hospital in quantities which will suffice for a month.

There are two other classes of requisitions. These include such articles as it is practicable for the board to purchase on the current market for only a week's or a month's supply.

STATE OF RHODE ISLAND — BOARD OF CONTROL AND SUPPLY

Date Ordered

REQUISITION.

Institutions in Cranston.

Date Wanted — No.

Quantity.	Article and Description.	To Be Filled at State House. Price.	Total.

To be used for ..... Writer.....

Approved by ..... Superintendent.

Date delivered — Date Received

Storekeeper Approved by

State House Copy — Officer.

Such requisitions are presented to the superintendent by the dietitian and housekeeper, weekly or monthly, as the case may be. On approval by the superintendent these requisitions are filed at the hospital in a loose-leaf folder. Copies in triplicate are made of these requisitions by the clerk on a small printed form, one article only on each form. One of these triplicate forms is filed at the hospital, the remaining two are forwarded to the disbursing agent, who retains one and forwards one to the office of the Board of Control and Supply.

KITCHEN, BAKERY AND CONGREGATE DINING HALL

In the organization of the work in these departments provision is made for the employment of a considerable number of patients. In receiving supplies, in food preparation, in baking and distributing food to the congregate dining hall, and in preparing the food boxes for the wards, there are, besides the dietitian and housekeeper, only eight paid employees at the main hospital, and at the reception hospital, including the assistant housekeeper, three paid employees. There are at the main hospital one cook, one assistant cook, one baker, two serving room men, two serving room women and one meat cutter, who also is the store man. In the kitchens and serving room and con-

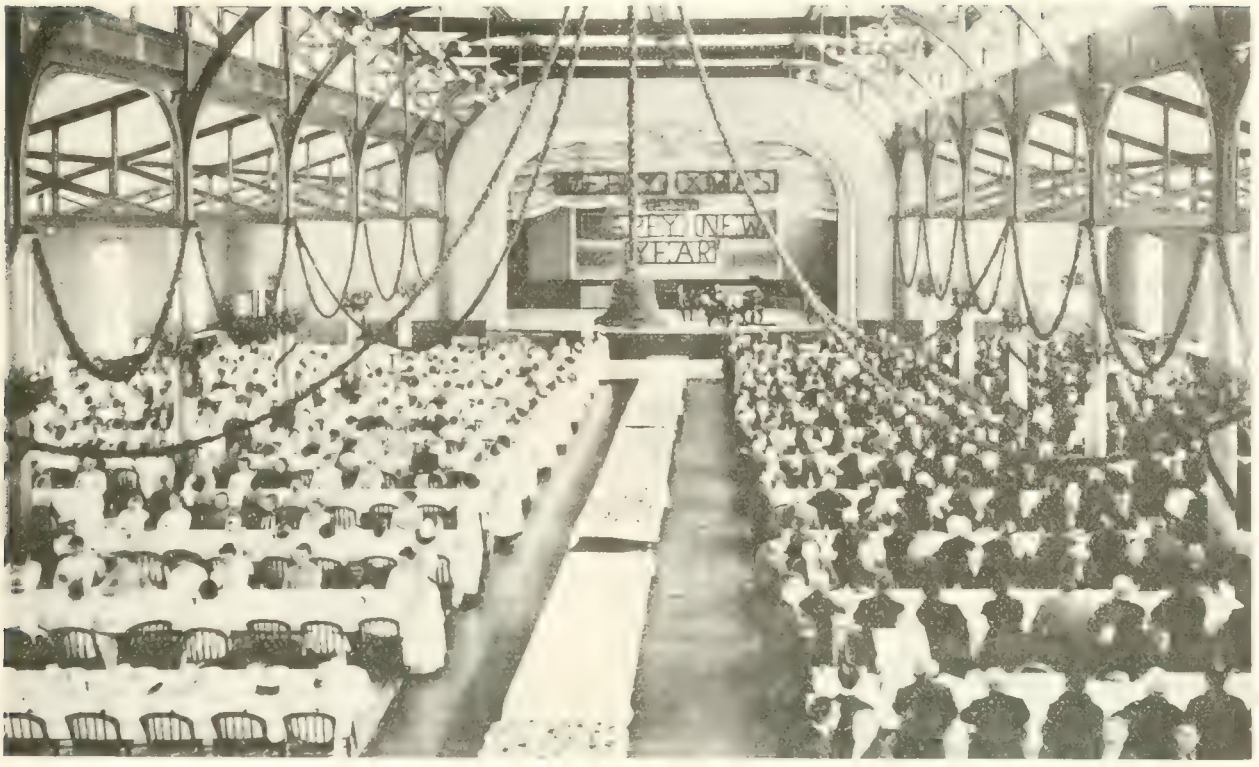


Fig. 1. Congregate dining hall, State Hospital for the Insane, Howard, R. I. Eight hundred people seated.

gregate dining hall, 38 men and 26 women patients are employed. The one baker with the assistance of seven patients does all of the baking for the institution. Each patient or small group of patients has certain routine work to do each day: for instance, the dish washing, the setting up of tables, the distribution of food boxes by means of the food carriages, the picking up of the food refuse from the tables, and so on. The principle adopted is that all work which can be done by patients under supervision shall be so performed, and the paid force is thus kept at the number stated.

LAUNDRY

I believe that when a superintendent of a large hospital for the insane starts out to build, equip and organize a laundry in his institution, at the first turn he will usually find that the architect has no conception of the space which should be allotted to the laundry; secondly, if he employs an engineer to specify machinery and submit drawings for its arrangement, that the engineer may produce what is probably a very good plan for a commercial laundry, but quite the reverse for a laundry for a state hospital.

The organization of the laundry for such a hospital must take into account the fact that a great part of the work is to be done by patients. Consequently, the relation of the patients to this work must be the determining factor in its planning and equipment. As compared with a commercial laundry, five patients will about equal one paid employee. On this account the laundry building of such a hospital must have ample space. Again, the hours of work for patients should be comparatively short, as compared with the hours of work of employees in a commercial laundry, so that the amount of machinery necessary to do the same amount of work as in a commercial laundry must be nearly doubled for a hospital for the insane. Ample units of machinery to allow a comparatively large number of patients to work, and also to shorten up the laundry working day, must be taken into account.

I believe that the best type of hospital laundry building is that which is of one story and practically upon the ground level. The building should have a basement, as this gives a much better and safer opportunity for steam and water supply and returns, and for conveying electric current, than to carrying these overhead. A laundry of one floor does not require any elevator service. This affords another element of safety.

I believe that such a building for a hospital of 1,500 patients should contain not less than 15,000 square feet of floor surface. An outside dimension of 200 feet by 80 feet gives a very good proportion. The roof should have a monitor running lengthwise of the building nearly the entire length. The monitor should have windows upon the sides which will insure both light and ventilation. Skylights should not be used; they let the light fall disagreeably upon the floor, perhaps where persons are obliged to stand in their work

and at times the heat from skylights is oppressive.

It is well to separate in a building of this size the wet room from the mangling, ironing and sorting room by a brick or cement partition with generous sized sliding door openings between the two rooms. All other partitions should be left out. It is much better in the instance of a hospital for the insane to do without the partitioning off of spaces except for toilets, laundry stores and dressing rooms.

In hospitals with stewards I think that the laundry should be under the direction of the steward, who should engage all of the laundry help.

At this hospital the housekeeper has the charge of the laundry. The paid employees here are one laundryman, one head laundress and three assistant laundresses. The number of patients employed is 17 men and 26 women. Each patient, or small group of patients, has individual work,

Fig. 2. The playing of tubular chimes is the signal for each of the several steps in the serving of a meal in the congregate dining hall.

the same as described in the kitchens and bakery. Some work on the washers and extractors, a group on the mangles, and a number of women patients on the ironing boards.

A system has been adopted here by which all filthy linen and clothing are placed in "blue bags," so-called from the color; all other soiled articles are placed in bags made of A C A ticking. This insures from the first the separation of filthy articles from the rest.

The sorting of clothing and linen and the prevention of the disappearance of articles in a laundry of a hospital offers a problem which I have not solved. I should be grateful for suggestions on this point.

SEWING ROOM

As the sewing is done mainly by women patients and is intimately related to the women's

Fig. 3. Distributing butter. By the means shown here butter is distributed to 800 patients in the congregate dining hall in less than three minutes.

wards, this work is under the supervision of the superintendent of nurses. Forty women patients are employed in the sewing room under the immediate charge of the sewing matron and her assistants. Aside from this the sewing matron prepares work which is passed to a supervisor who distributes it to the women's wards, both quiet and disturbed. All material is charged to the ward to which it is delivered and the supervisor collects the finished articles regularly.

We have found that sewing in the wards, especially in the disturbed wards, has given occupation to many patients who are unsuited for and who cannot be induced to take up other work.

CONGREGATE DINING HALL

In these days of large state hospitals in which the number of patients ranges all the way from 1,000 to 5,000, the distribution of food offers a problem of considerable magnitude. Practically one-third of the cost of conducting large hospitals

is expended in purchasing, preparing and placing food before the patient.

The purchasing and preparation of foods offer the least difficulty. There are economic methods of purchasing and scientific principles of preparation which are positive, a knowledge of which is open to all and the practical application of which requires only the proper attention to details.

It cannot be said, however, that a satisfactory method of placing the prepared foods before the patients of a large hospital has yet been devised.

Fig. 4. Distributing desserts. By means of wire racks, each holding sixteen saucers, desserts are distributed to 800 patients in less than three minutes.

In discussions to which I have been privileged to listen upon this subject it has seemed to me that the majority have condemned the congregate dining hall. It is true that the ward dining room, accommodating only the patients of the ward to which it is attached, or at the most a group of wards with a comparatively small number of patients, has its disadvantages; yet many prefer the small unit, choosing it as the lesser of two evils.

I maintain, however, that the congregate dining hall can be made a pronounced success, both from the managerial standpoint and from that of the patient. What I shall present is based upon personal attention to the subject and an experience extending over several years in the management of a congregate dining hall.

I shall first enunciate three principles, which are the fundamentals of congregate dining hall management. These principles are, (1) to make an appeal to the esthetic sense; (2) to establish efficiency of service, and (3) to derive from the system a therapeutic value. These three principles relate themselves to each other. They form, as it were, a tripod. Remove any one and the whole structure falls.

As the subject is developed in what follows, I hope to make my meaning clear. When I speak of the large congregate dining hall for a State hospital, I mean one which seats five hundred or more patients. I do not feel that it is necessary to fix the maximum limit of a large congregate dining hall, for by the method which I shall describe, the number of patients need be limited only by the proper seating capacity of the hall.

A congregate dining hall properly planned with a seating capacity of anywhere from one thousand to two thousand patients will not present any difficulty, if the system here described is lived up to. Attention must be given, however, to the percentage of the whole number of patients in the hospital who attend the congregate dining hall; and discrimination must be exercised as to the class of patients who attend.

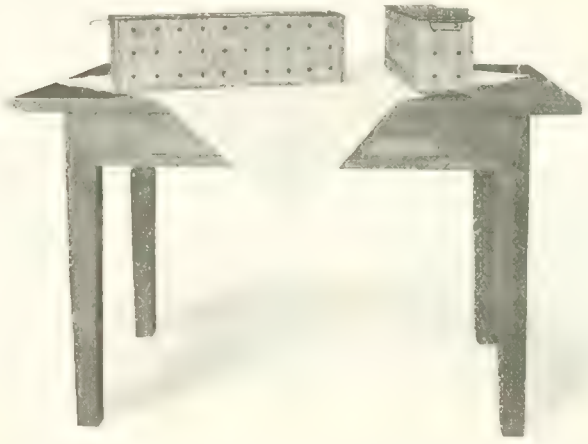


Fig. 5. Perforated boxes in which potatoes are steamed. Each holds potatoes for 32 patients.

From my experience and from information which I have gathered from different sections of this country I believe that about sixty percent of the patients in a large hospital for the insane are capable of taking their meals in a congregate dining hall; by which I mean that there are to be found in most hospitals that percentage of patients sufficiently able-bodied to walk to and from the hall, and sufficiently careful of their dress and personal appearance or capable of becoming so after a little teaching from the nurses; and who are cleanly in habits, not slovenly in their manner of partaking of their food, and not boisterous or offensive in their general conduct. In fact, a proper system is a training for both nurses and patients; the former learn to give greater attention to the personal appearance and habits of their patients, while the latter, although many

are domiciled in so-called disturbed wards, learn good behavior in the dining hall.

In the observance of the three principles which I have mentioned, attention must be given in the first place to the architectural features of the dining hall. I believe that the best result is obtained when the dining hall is a building of one floor, built practically upon the ground level, with basement. This building should be, if possible, at the center of the hospital plant, with serving room, kitchen and bakery attached. It is a prime necessity that the construction and decoration of the hall should be such as to avoid a cold and barren effect. This can be done by breaking up space by supporting columns, brackets or exposed roof timbers. If the brackets and roof supports are of wood, a warm and pleasing effect may be produced by a natural finish and by painting the walls in terra cotta and ceilings in a light buff.

Fig. 6. Removing potato boxes from steam cooker and placing them in tin enveloping receptacle, with cover, which retains the heat. These receptacles are then conveyed to the dining room.

Decoration by means of natural or artificial plants must be added. An orchestra to play during the meals is a *sine qua non* of the system, a stage or platform being provided for this and a gallery for visitors.

We come now to the consideration of efficiency of service. Various devices and utensils are necessary for conveying food from the kitchen and serving room in order that there shall be no unnecessary handling or undue cooling of food before it reaches the patient. The nurses must pay strict attention to the established routine in serving, and see that one act is carried out at a time, and by all at the same time throughout the hall; that the same order of service be carried out each day; that each stage of the meal shall begin and end at the same time throughout the hall; and that there shall be no hurrying.

With these statements I shall try to picture, as well as I can by words, the congregate dining hall at the State Hospital at Howard, Rhode Island, and the progress of a midday meal.

The floor space of that portion of the hall appropriated to the patients' tables is 146 feet by 100 feet. The seating capacity is 896, giving each person a little over 16 square feet. Opening out of one end of the dining hall is the main serving room, and connected with this serving room are the kitchen and bakery. There is a gallery at one end of the hall for visitors. At the opposite end is a stage, where the musicians are seated. This stage is sufficiently ample to accommodate a large chorus of singers or a full band.

The height of the side walls from floor to ceiling is 22 feet. Starting at the ceiling line on the side walls the roof rises, so that at a distance of 25 feet from the side walls the height of the ceiling is 28 feet. On a line 25 feet from the side walls lengthwise of the hall, on each side, are seven supporting columns. Widthwise of the hall the distance between these columns is 50 feet. Extending the whole length of the center of the hall is a monitor roof 50 feet in width. This monitor has in the sides transom windows. The distance from floor to ceiling throughout the space occupied by the monitor is 39 feet. The monitor windows are operated in sections by a worm gear, the hand wheels of which are in reach of a person standing upon the floor. These transoms with the windows of the side walls insure abundant light and ample opportunity for ventilation. Window shades are not used, but the transom windows and the upper sash of the windows in the side walls are glazed with translucent glass. This latter prevents the sun from striking disagreeably upon the tables or faces of the patients.

Extending the whole length of the hall on the side walls is a slate shelf which is warmed by radiators enclosed in grilled boxes under the slate, which serve also for heating the hall (Fig. 7). The slate shelves become sufficiently hot to warm stacks of crockery placed upon them between meals and also to give heat to the boxes of food placed upon them at meal time. The slate shelf is two feet wide and is in fact a serving sideboard.

The patients' tables are 16 feet by 4 feet. The long dimension of the tables extends widthwise of the hall, with a broad center aisle of twelve feet running the length of the hall. The men are seated on one side of this broad aisle, the women

on the other. Each table seats 16 patients. Two tables of 16 patients each, or 32 patients, constitute the unit upon which all the service is based.

The food for each unit of 32 persons is distributed in the food boxes in the kitchen and serving room and these boxes are conveyed on food carriages to the sideboard, just before the patients enter the dining hall. The boxes containing the warm food remain with covers on until the serving begins.

Fig. 5. Potatoes are served onto plates direct from the steam boiler. This is the only handling of the potato between the steam cooker and the patient's plate.

One rule to be strictly observed is that not a morsel of food is to be placed upon the tables before the patients enter the hall. The only articles upon the tables at this time are cups, saucers, drinking glasses, pepper and salt shakers and vinegar cruets. The plates and all side dishes which are to be used, as well as the bread trays, holding the sliced bread, are upon the sideboards.

Each procedure of serving is announced by the playing of tubular chimes (Fig. 2).

We are now ready to describe the details of serving a meal, we will say a dinner. At 11:45 a. m. a signal is sounded upon the chimes. The orchestra then begins to play and the patients come in at four entrances and take their proper seats. This procedure occupies five minutes. As soon as the patients are all seated the second signal is sounded. This is for the distribution of the knives and forks. One nurse is detailed for each group of 32 patients. The nurse steps to the sideboard and, taking the tray holding knives, forks and spoons, distributes to each patient in the group the requisite number of eating utensils. As soon as this is done, the signal sounds again. On this announcement the nurse turns to the sideboard, removes the covers from the food boxes and begins serving the portions of meat, potato and vegetables upon the plates which are at hand on the sideboard. At the same time two patients from each group of 32 rise from their places and take from the sideboard one plate in each hand as the nurse fills them, and carry them to the patients in the group to which they belong. Thus each patient makes eight trips. These two patients lastly take their own plates with the food placed upon them, resume their seats at the table, and are then free to proceed with their meal. The nurses then pass the bread, distribute the butter chips and fill the cups and glasses. (Fig. 3.) The nurses of each group from that time on attend to the individual wants of the patients in the groups to which they are detailed, giving the patients second helpings, if necessary, keeping the glasses filled, and supplying them with bread.

At the end of 25 minutes (it being now 12:10 p. m.) a signal sounds. On this signal the nurses, with the exception of two supervisors and eight other nurses, retire to their own tables to take their midday meal, the ten persons remaining upon the floor being sufficient to attend to all the wants of the patients.

In the meantime the desserts are being distributed into saucers in the serving room. Sixteen saucers with dessert are placed in a wire rack and when all racks are ready, they are conveyed by food carriages to the dining hall. Two racks, containing altogether 32 desserts, are placed upon the sideboard opposite each group. At 12:30 p. m. a signal is sounded, on which two patients from each group distribute to their group the saucers holding the desserts. (Fig. 4.) At 12:40 p. m. the signal sounds again. This has given the nurses, who retired to the nurses' table for dinner, 30 minutes for their meal. The nurses then return to their groups and on signal pick up the eating utensils and return them in the trays to the sideboard. On obtaining a knife, fork and spoon from each patient in this way, the number of utensils is checked up. At the final signal at 12:45, the patients leave the dining hall. The orchestra has been playing all of this time and one full hour has been consumed.

The accompanying illustrations show some of the utensils and devices employed to produce efficiency of service.

The orchestra should not be too large. From four to six pieces are sufficient. For instance, a piano, a first and second violin, a cornet, a clarinet and a bass viol are ample, even for a very large

hall. The character of the compositions played must be heeded, for the whole scheme may be easily marred. While the patients are entering and leaving the hall and during the distribution and picking up of the silver, lively marches can be played. During the earlier part of the hour loud music is not out of place. But after the main serving has been finished and the patients are all supplied with their food, the music should gradually become more subdued, until towards the end of the meal it should be *pianissimo*. The effect of this subdued music upon the gathering is really quite surprising. I will insert here a sample program which may illustrate what I mean.

PROGRAM

March: Dunlap Commandery.....*Hall*
Distribution of Silver: Saddle Back Galop.....*Allen*
During the Meal: Overture, Magic Flute.....*Mozart*
Spanish Dances No. 1.....*Moszkowski*
Spanish Dances No. 2.....*Moszkowski*
and Sextet from Lucia di Lammermoor.....*Donizetti*
Collection of Silver: Saddle Back Galop.....*Allen*
March: Liberty Bell.....*Sousa*

If I have made this description clear, I think it will be seen that it is immaterial how many units of patients we have, provided we have the proper arrangement for the care of each unit.

In regard to the size of the unit I will say that it is practical for this to be of 20, 24, 28 or 32 persons. If division into smaller or larger units should be made, a disadvantage would arise. In my opinion a unit should not be less than 20 nor more than 32, because in the first instance the food would be distributed in too small amounts to retain its heat, and in the second instance the food for the units would be too bulky to permit of ease in handling. The smaller the unit, moreover, the larger the number of employees required. I think that a unit of 32 offers the greatest advantage from the standpoint of efficiency and economy.

In the large congregate dining hall certain forms of entertainment may be given, during or immediately after the meal, as singing by soloists or by a chorus. After the supper hour on Sunday evenings, at this hospital, entertainments are frequently given in the dining hall. When the meal is finished, all patients who are seated with their backs to the stage turn their chairs about, and we have thus assembled without extra effort an audience of 800 or more people.

The congregate dining plan, administered in the way described, brings the patients together from their wards to a large, light, airy and attractive hall. An appeal is thus made to the esthetic sense, which in many of our patients is by no means dormant. The patients are given ample time to partake of their meals. The food is served steaming hot. The technic followed results in an efficiency which is totally lacking under the usual method of placing the food on plates already on the table before the patients enter the room. The latter method is fatal to success in conducting a congregate dining hall.

I believe that the lack of a full conception of the principles which I have set forth and the failure to grasp the idea that there must be a strict method in the congregate dining hall are accountable for the general disfavor of the system. When the system is followed as I have described, I believe that the congregate dining room becomes a therapeutic measure of great value, to say nothing of its economical advantages.

Daily weighings of the food refuse left upon the tables after the meals show that the average waste of food for each patient is three ounces per day. The entire work of caring for the congregate dining hall is done by two paid employees. Aside from the duties performed by the nurses in serving the food during the meals, the remainder of the work, which includes the conveying of the food on the food cars, the dish washing, the clearing away and the setting up of the tables, is done entirely by the patients.

Noted Hospital Worker Gone

Mrs. Cammie R. Howard, a well-known philanthropist and hospital worker of Dallas, Tex., died in that city on July 8, after a long illness.

Mrs. Howard had long been an ardent worker in the interest of the health of the people in her home city, and through her son, Dr. M. M. Carrick, was largely responsible for the State Tuberculosis Sanatorium, and for Woodlawn Hospital for Tuberculosis at Dallas. To the latter institution she left in her will the sum of $25,000.

Mrs. Howard was born in Louisiana in 1853, but had made her home in Dallas since 1890. She left a great host of friends to mourn her death, and her many benefactions will be living, working monuments to her benevolence.

Health Center in Buffalo

The Philadelphia Health Center plan, which involves the extension of the ordinary activities of the infant welfare station to include intensive work upon all the health problems of a defined area, is to be tried out in Buffalo. The free milk dispensary at 1067 Grant street is to be the center of the work, which is to be in charge of a newly organized Buffalo Federation for the Promotion of Public Health. There will be special standing committees at the center on domestic science, little mothers' leagues, obstetrical clinics, district nursing, medical inspection, food and sanitation, housing, streets and social service. Sanitary Supervisor Clark and Mrs. Carter, of the Public Health Nursing Service of the Department, have assisted in promoting this important organization.

A new twenty-five-bed hospital has been opened at the Illinois Odd Fellows Home, Mattoon, Ill.

OCCUPATION FOR MENTAL CASES DURING INSTITUTIONAL CARE

Care and Discrimination Required in Prescribing Work—Proper Occupation Stimulates Orderly Thinking—Work Must Be New and Interesting—Free From Monotony—Small Jobs Should Come First

By CARL W. SAWYER, B. S., M. D., White Oaks Farm, Marion, Ohio

DURING the last few years many ideas have been promulgated for the curing and to aid in the curing of the so-called "insane." One of the latest is the work or occupation cure.

To the casual observer it would seem that what is needed to keep us from going "crazy" and to cure us after we do go "crazy" is work; pure, simple, unadulterated work. And at the present time nearly every institution that cares for mental cases, and every physician who treats mental cases, is lauding in loud terms his occupation courses and advising indiscriminately work of any and all kinds. In fact, one would be tempted to state that our asylums should be turned into factories and our doctors into foremen, were we to believe all that has been written and said on the subject.

Observation and experience with this new form of therapy, however, will soon convince anyone that it is a two-edged sword, capable both of much good and much harm.

After eight years of experience in this branch of therapeutics, I am convinced that it is a measure that must be prescribed as carefully as any other treatment measure. It is neither a panacea or a thing to be used haphazardly. Moreover, it is a procedure with good reason behind it and definite ideas of application, and when it is finally worked out in its entirety we will discover that it bears a very definite place in therapeutics.

The general conception of work therapy is to keep the patient busy. "The devil finds work for idle hands," is the general assumption in prescribing occupation courses. The actual facts in the case are far deeper than this.

Work is really prescribed to create ideas. Most mental cases have either a paucity of ideas, confused ideas, or erroneous ideas. In other words, their manner of thought is poor. Now work, new, interesting work, comes with its freshness and brings new ideas.

Fig. 1. Sawyer Sanatorium, Marion, Ohio—where everybody is busy.

The taking up of the new ideas means a dropping for a time at least of the old ideas; in other words, new nerve fibers are set to work, new cells are brought into activity, new paths of consciousness are developed or uncovered and the patient is lifted out of a mental rut.

In order to stimulate new paths of consciousness the work must be new to the patient. It does not do to put the farmer at farming, the shoemaker at making shoes, the broom maker at making brooms, and the like. The regular treadmill life must be broken up. We must all have a vocation and an avocation. The vocation must make our living and the avocation must make us our health. Work therapy must pass purely as an avocation.

Experience has shown that many business men, many farmers, many women who have done

housework, receive great benefit from basket weaving, lamp making, etc. It is to them a new subject, different from the old grind, admits of individual ideas and creates new paths of thought.

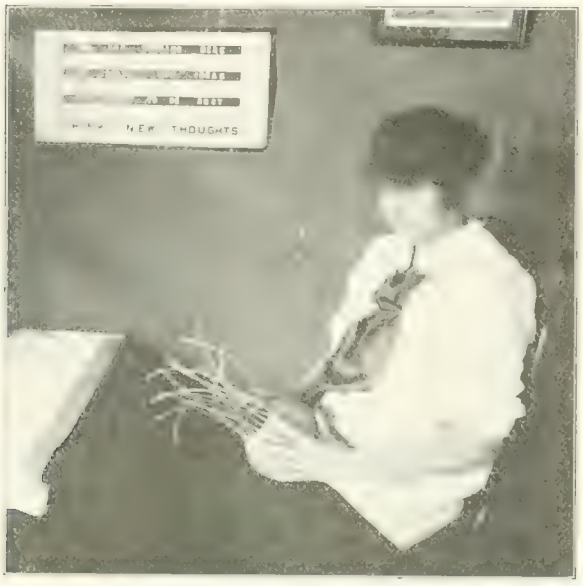


Fig. 2. The sign in the class room

For fear that it may become monotonous, the form of work should be frequently changed. As soon as the novelty wears away it becomes a drudgery and the results are nil. The first lamp, the first basket, brings big results. The patient feels that he has accomplished something, but the second, third and fourth, unless of entirely different pattern, do less and less good, consequently there must constantly be variety.

There should always be some stimulus for doing the work. Patients can seldom see, until they have recovered, how it is going to help them to do "this foolish thing." They should be urged to make something as good or better than the pattern shown them, something to send to a wife, or a child or the like, and they should always be told when they have accomplished creditable work.

One of the fundamental characteristics of human beings is that they wish to feel that they have accomplished something in the world and that they secure just praise for this accomplishment. A skilful teacher will know when and how to stimulate desires and when and how to give just credit.

As to the choice of work much could be said. Personally, we have tried a number of plans. The Montessori system of teaching deficient children, however, offers the best suggestion. Madame Montessori insists that the children must be allowed to do as they desire; they must only be guided in their selection by suggestion. In her classroom the various teaching paraphernalia are placed on low shelves so that the child can reach them, and the child is permitted to take such articles as he desires to work with. So it is with the mental case. The new patient is permitted to visit the classroom and to choose such lines as he desires. By skilful suggestion the teacher can often determine the choice when none would be made, or change the choice which she knows is not best, but nothing must lead the pupil to feel that he must take a special line.

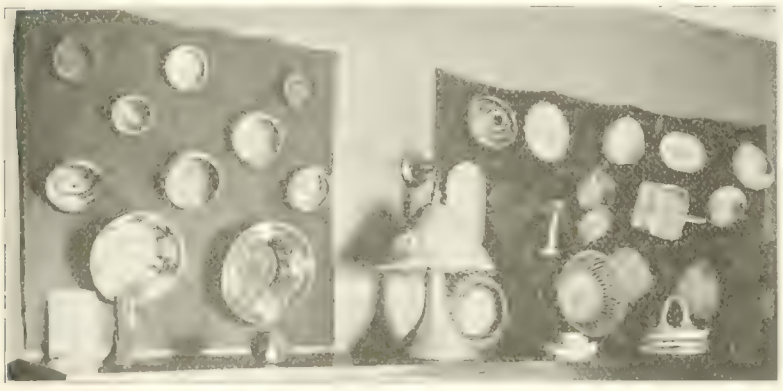
For this reason it is not possible to sell the work of the educational department by contract. This would necessitate the teacher's having a certain number of a certain kind of articles made, and the likelihood would be that the patients would not choose the articles which the instructor needed to have to finish her contract.

Often the patient, like the deficient child, will choose one thing after another until he has tried all of them. Generally then, he will take up the one that he likes. Should he not do so the instructor should assist in the choice. Really she should make the choice, but she must do so without the patient's feeling that it has been thrust upon him.

As a general rule large pieces of work should not be attempted. Smaller pieces of fancy work, brass work, leather work, basket work and the like, are far better than rug weaving. In an occupation such as rug weaving the patient too often stops in the middle of it, and it is seldom that a new patient desires to finish work that someone else has started.

Fig. 3. Some of the results.

The length of time the patients work varies with their physical condition and their moods. Many weave a few stitches and quit; then return and weave a few more, taking a long time and many hours to complete a small amount of work. Others will keep constantly at their work for hours, and those should be carefully supervised, for under no circumstances should the occupation become fatiguing. The minute weariness appears work should be stopped or changed. New brain conducting paths, reawakened cerebral cells, like



new muscle fibers, must not be over-used; they must be trained.

And, last but not least, in our work therapy, we must realize that its greatest good comes in satisfying those cravings caused by what I term primitive ideas. In fact, the more we follow this line of treatment, the more we feel that in this alone, the reawakening of primitive ideas, lies the principle of its success. For instance, let us illustrate by what is termed the "motherly instinct."

If, as the physiologist and anatomist say, our chief function in this world is to create our kind, then one of the deepest traits we have is to care for our offspring. This is exemplified in the female by motherliness; that is to say, the care of the offspring; and in the male by making a place in the world for the offspring, and in finding its sustenance and in enjoying its successes.

Now take the case of "motherliness." Every woman has the desire for offspring. If she is young she hopes some day to become a mother, to have a baby of her own. If she is middle-aged she desires to care either for her own children or for a child of some other person, and if she is aged she reverts back to the joy of caring for her children in the past.

No matter how disturbed the brain, the mother instinct usually shows in some tangible form. I have seen the most violent and obscene mental individuals make rag babies out of their bed clothes and care for them as tenderly as if they were flesh and blood. And I have seen so-called neurasthenics whose greatest longing was to have children of their own.

It is impossible and in most instances not feasible to give these people real, live babies to work with. But one can, for instance, set them to dressing dolls. Trivial as it may seem, this light and foolish occupation will often help to right a disordered brain because it actually causes the patient to awaken and use submerged channels of thought, which are really great highways of life, actually leading into all the avenues of orderly existence. Or they permit of the expenditure of submerged and pent-up feelings, and by freeing the mind of its incumbrance permit of the awakening of other normal lines of thought; and in this way they act much as the catharsis of Freud in his dream analysis. And that is the real purpose of work therapy, to exercise the mind just as massage exercises the muscles and to create new channels of thought—not simply to amuse patients, fill up their time or to follow the latest fad.

THE LONDON VOLUNTARY HOSPITALS' BUDGET

Expenditures Growing at the Rate of $200,000 Annually—Large Addition Sums of Extras

It is estimated that the expenditure of the London voluntary hospitals and dispensaries has been increasing of late years at the rate of about $200,000 a year. In 1911 it was about $6,075,000, in 1912 about $6,275,000, and in 1913 about $6,475,000.

In a recent number of *The Hospital*, London, the above figures are given as covering the "ordinary every-day needs" of the hospitals, and mention is made of "special needs" that add from $1,000,000 to $1,500,000 annually to these estimates. The following table, showing the sources of the income of the London hospitals and dispensaries in the ten years 1904 to 1913 appeared in the same issue:

	From the Living		From the Dead				
Year	Subscriptions, Donations, Patients' Payments, etc.	Percentage of Total	Investments	Percentage of Total	Legacies	Percentage of Total	Total Income
	£		£		£		£
1904	603,425	50	258,567	22	319,303	28	1,181,295
1905	610,130	49	264,790	21	373,914	30	1,248,834
1906	635,377	58	272,704	25	186,284	17	1,094,365
1907	653,320	48	296,218	22	407,918	30	1,357,456
1908	712,461*	56	290,491	23	265,493	21	1,268,445
1909	701,458	57	294,206	24	240,523	19	1,236,187
1910	703,841	50	309,320	22	394,478	28	1,407,639
1911	738,622	53	329,253	24	322,949	23	1,390,824
1912	741,439	55	338,425	25	272,090	20	1,351,954
1913	845,908*	52	349,295	22	424,339	26	1,619,542

*Includes £72,565 and £103,970, the amounts received by the London Hospital in 1908 and 1913, respectively, as the result of its Quinquennial Appeals in those years.

MEAT EXTRACTS, PROPRIETARY PREPARATIONS AND BEEF, WINE AND IRON[1]

Original Liebig Formula for Extracts Still the Best—Nutritive and Physiological Value of These Products—Adulterants—Beef, Wine and Iron Delusive as to Value for Food or Medicine

By JOHN PHILLIPS STREET, Chemist Connecticut Agricultural Experiment Station, New Haven, Conn.

PAPER IV—PART II

MEAT JUICES AND ESSENCES

The U. S. standard for meat juice requires that it shall be "the fluid portion of muscle fiber, obtained by pressure or otherwise, and may be concentrated by evaporation at a temperature below the coagulating point of the soluble proteids. The solids contain not more than 15 percent of ash, not more than 2.5 percent of sodium chloride (calculated from the total chlorine present), not more than 4 nor less than 2 percent of phosphoric acid, and not less than 12 percent of nitrogen. The nitrogenous bodies contain not less than 35 percent of coagulable proteids and not more than 40 percent of meat bases."

A true meat juice is in an entirely different category from a meat extract. While the latter contains but small amounts, if any, of coagulable proteins, the process by which a genuine meat juice is prepared requires the presence of considerable quantities of these proteins, thereby giving the juice some real food value. Unfortunately many of the commercial meat juices are entirely unworthy of the name. As the above definition clearly implies, the word "juice" in this connection should apply only to the fluid portion of fresh meat muscle, which is obtained by pressure or diffusion with a very moderate degree of heat. Under heavy pressure from 25 to 40 percent of a thick, red juice may be obtained from freshly chopped meat. The analyses of meat juices prepared in the laboratory of Bigelow and Cook (*Bur. of Chem., U. S. Dept. Agr., Bull. 114*) show that while the method of preparation causes wide variations in the composition of the resultant juices, they are all characterized by a relatively large proportion of coagulable protein nitrogen ranging from 45 to 79 percent of the total nitrogen. A sample made from "juice from beef chuck by cold pressure after 6 hours at 60-100° C." shows very clearly the effect of long heating at high temperatures, no coagulable protein being present.

Table III gives analyses of eight brands of meat juice or essence. It will be noted that the percentage of the total nitrogen which is coagulable ranges from none at all to 38 percent, showing how little the brands listed are entitled in any way to the name "meat juice."

Bovinine is prepared largely from blood (*Chittenden, Medical News,* 58, 716) and contains considerable proteose nitrogen and practically no meat bases; it contains about 8 percent of alcohol by volume. It is a rather common assumption that blood must be a food of high value, but such is not the case. "The misconception proceeds from a neglect of the fact that blood is not in itself the food of the tissues, but is merely the vehicle by means of which nourishment is carried from the intestines to the places where it is wanted in the body." Bovinine is *not* a "concentrated food," as claimed.

Bovox is essentially a fluid meat extract and does *not* contain "a large proportion of nutriment, as well as all of the stimulating salts and in a concentrated form." It contains a large excess of added salt. Brands' Essence is likewise a dilute fluid meat extract, the two samples showing a wide difference in concentration.

Carnine possesses certain characteristics of a meat juice, namely the proportion of insoluble protein, but this it is claimed (*Jour. Amer. Med. Asso.*, Nov. 20, 1909) is due to a small amount of defibrinated blood. Its apparent concentration is deceptive, for, while it contains about 75 percent of solids, 47.5 percent of cane sugar and 14.2 percent of glycerol are present. It is therefore in reality a dilute meat preparation and scarcely entitled to the appellation "meat juice."

Maggi's Bouillon, other than by its misleading name, makes no direct claim that meat has been used in its preparation. It is *not* "a highly concentrated preparation," as claimed, contains much added salt and practically no creatinin and creatin, which are characteristics of meat. It does contain a relatively large proportion of basic nitrogen, which apparently is not derived from meat.

Mason's Essence of Beef claims to be a condensed food made "solely of the juice of the finest fresh beef." The almost complete absence of coagulable nitrogen shows that it is not a true meat juice, and, instead of being concentrated, is a very dilute preparation.

Valentine's Meat Juice has the characteristics of a dilute fluid meat extract, and none of those of meat juice. It contains practically no coagulable protein and has little nutritive value.

Wyeth's Beef Juice resembles a meat juice more than most of the preparations listed, but only 16 percent of its nitrogen is coagulable, less than

[1] This is the second half of the paper on "Meat Extracts." The fifth of this series of articles by Mr. Street will be on the subject "Package Foods" and will be published in September.

Table III. Analyses of Meat Juices and Essences

Brand	Manufacturer	Alcohol by Volume.	Water and Volatile.	Organic Matter	Ash.	Chlorin as Sodium Chlorid	Phosphoric Acid.	Potash.	Acidity, cc N_{10} NaOH per gram.	Nitrogen as: Total.	Insoluble and Coagulable.	Proteoses.	Peptones.	Total Meat Bases	Creatinin and Creatin.	Xanthin or Purin Bases.	Other Meat Bases	Ammonia.	Fat.
[1]Bovinine	The Bovinine Co.	8.1[illegible]	68.24	30.18	1.61	1.32	trace	0.18	0.31	2.57	0.20	2.26	0.00	0.07	0.00	0.03	0.04	0.04	0.09
[1]Bovox	The Bovox Co.	....	51.74	30.25	18.01	14.07	0.88	1.76	1.18	1.02	0.06	1.58	1.32	1.00	0.29	0.07	0.61	0.16	0.29
Brand's Essence of Beef	Brand & Co.		90.95	7.13	1.94	0.09	0.18	....	0.98	1.28	0.03	0.60	0.18	0.43	0.11	0.01	0.31	0.04	0.51
Carnine	Carnine Co.	..	24.80	*74.34	0.86	0.09	0.33	....	2.[illegible]	0.96	0.36	0.11		0.19	....	..	....	....	....
[1]Maggi's Bouillon	The Maggi Co.	.	19.34	29.32	21.34	18.88	1.01	1.61	2.12	2.88	1.00	0.33	0.19	1.88	0.06	0.06	1.76	0.18	0.00
[1]Mason's Essence of Beef	Mason Conc. Food Co.		88.18	10.16	1.66	0.23	0.42	0.62	0.35[illegible]	1.30	1.05	0.57	0.08	0.34	0.13	0.05	0.16	0.06	0.09
[1]Valentine's Meat Juice	M. S. Valentine	..	35.72	52.55	11.53	1.49	2.67	5.18	1.31	3.13	0.05	0.12	0.78	1.92	0.35	0.37	1.20	0.26	0.10
[1]Wyeth's Beef Juice	John Wyeth & Bro.		53.81	29.02	17.17	7.81	3.06	1.18	1.72	3.25	0.53	0.20	0.65	1.68	0.29	0.16	1.23	0.19	0.02

[1]Street, Rept. Conn. Expt. Station, 1908, 642, 652.
[2]Bigelow & Cook, U. S. Dept. Agr., Bur. of Chem., Bull. 114.
[3]Propaganda for Reform in Proprietary Medicines, 7th Ed., p. 61.
*Containing 47.50% cane sugar and 14.2% glycerol
†Glycerol present.

Table IV. Meat Cubes, Capsules, Etc., and Meat Powders

Brand.	Manufacturer	Water.	Organic Matter.	Ash.	Chlorin as Sodium Chlorid	Phosphoric Acid.	Potash.	Acidity, cc N_{10} NaOH per gram.	Nitrogen as: Total.	Insoluble and Coagulable.	Proteoses.	Peptones.	Total Meat Bases.	Creatinin and Creatin.	Xanthin or Purin Bases.	Other Meat Bases	Ammonia.	Fat.
Cubes, Capsules, etc.																		
[2]Ivelcon Cubes	Alpin & Barrett	9.25	35.19	55.65	23.93	....	..	....	3.09	0.13		0.95	1.90	0.41	....	....	....	1.45
[1]Beef Extract and Vegetable Tablets	Armour & Co.	10.21	60.22	29.57	22.42	2.21	3.76	3.65	4.13	1.77	0.52	1.35	0.68	0.29	0.19	0.08	0.13	0.36
[2]Vimbos Cubes	Bovril Limited	7.19	57.85	34.95	19.36	..	..	....	6.86	2.63		1.95	2.28	0.90	..	..	....	1.70
[2]Steero Bouillon Cubes	American Kitchen Products Co.	6.56	28.23	65.21	59.18	..	....	..	3.89	....	..	..	..	..	..	....	....	1.67
[2]Bovin Cubes	E. S. Burnham Co.	7.00	49.30	43.70	19.63	..	....	....	3.32	0.11		1.16	1.74	0.39	..	....	....	2.60
[4]Oxo Bouillon Cubes	Corneille, David & Co.	4.55	25.79	69.16	62.50	..	..	..	3.28	..	..	..	....	....	..	....	....	3.58
[4]Knorr's Consomme	C. H. Knorr	4.32	29.17	66.51	61.46	..	..	..	3.18	..	..	..	....	....	..	....	....	5.43
[1]Mason's Beef Tea Lozenges	Mason-Heublein Co.	10.82	74.50	9.68	2.21	2.50	1.03	1.77	*3.01	1.19	?	?	2.16	0.91	0.60	0.75	0.14	0.06
[1]Anker's Bouillon Capsules	Royal Specialty Co.	8.61	14.30	47.09	38.38	6.12	1.90	1.90	5.54	0.21	1.12	1.07	2.00	0.66	0.27	1.07	0.24	0.07
Meat Powders.																		
[1]Somatose	Farbenfabriken of Elberfeld	11.19	82.72	6.09	0.03	1.47	0.13	1.50	12.61	0.05	10.60	1.59	0.26	trace	0.04	0.22	0.14	0.09
[1]Mosquera Beef Meal	Mosquera-Julia Food Co.	12.58	82.23	5.19	0.99	1.45	2.24	2.39	12.25	6.73	0.63	2.52	1.11	0.28	0.04	0.49	0.26	8.56

[1]Street, Rept. Conn. Expt. Station, 1908, 669.
[2]McGill, Canada Int. Rev. Dept., Bull. 267.
Street, Rept. Conn. Expt. Station, 1911, 162.
[4]Street, Rept. Conn. Expt. Station, 1914, 238.
*Contain much gelatin.

one-half of the required amount, and it contains only 64 percent of the nitrogen of the standard. The claim that it contains "the nutritive albuminous principles in an unaltered and soluble form" is obviously untrue.

MEAT CUBES, CAPSULES, ETC.

These have considerable vogue at the present time because of their convenience in the hasty preparation of a warm beverage. They consist, as a rule, essentially of meat extract with large quantities of common salt; in some cases much gelatin is present, and at times the meat extract is supplanted wholly or in part by vegetable extracts. Table IV gives analyses of nine brands of such preparations. Mason's Beef Tea Lozenges is the only brand listed which contains important amounts of gelatin. The ash ranges from 9.68 to 67.46 percent, of which from 23 to 93 percent is common salt. Excepting the Mason sample, the nitrogen ranges from 3.00 to 6.86 percent, which is generally of the character usual in a meat extract. Armour's Beef Extract and Vegetable Tablets and the Vimbos Cubes, however, contain a large proportion of insoluble nitrogen, probably due to the vegetable matter or meat fibrin. As a rule these capsules also contain relatively large amounts of fat. Their nutritive value, however, is generally small, their usefulness being in their facility for the rapid preparation of a warm, refreshing, appetizing and mildly stimulating drink. Based on the charge for twelve cubes, one pound of the cubes of one of the best known brands would cost $3.05. The six-tenths of a pound of salt contained in this quantity could be purchased separately for about one cent; the meat extract in them, therefore, costs at the rate of $7.60 per pound. It is apparent that while the cubes may offer many conveniences in their use, they are a very expensive form of food.

MEAT POWDERS

Only two brands of this character are given in the table. Ordinarily lean meat contains about 25 percent of solid matter; if all of the water were removed the residue would contain about 87 percent of proteins, 8 percent of extractives and 5 percent of ash. This more or less complete removal of water is the practice followed in the preparation of meat powders. In some preparations, however, not only is most of the water removed, but the protein matter is treated with an appropriate ferment and a "predigested" or peptonized product results. Unlike meat extracts, meat powders, if properly prepared, are highly nutritious, and are the only means of securing the full nutritive value of meat in small bulk. Certain authorities have maintained that they are difficult of digestion, but later experiments have controverted this position, and they are now quite generally recommended as being readily digested and assimilated.

Somatose claims to be "an easily digested food made from meat," "a highly concentrated and stimulating meat preparation, containing all the essential food constituents in a soluble and easily digested form;" "it contains the nourishing elements of meat in a readily soluble form, 80 grains of somatose being equivalent to about 1½ ounces of fresh beef (1-8). The salts present correspond to the nutritive salts of fresh meat, among which occurs the phosphate of potassium, so important in the formation of bone and muscle." The analysis indicates that these claims are well founded.

Mosquera Beef Meal claims to be "the only preparation in the market which truly represents all the constituents of prime lean beef, viz., the albuminoids, the fat, the extractive substances and the mineral salts." These claims, allowing for the manufacturer's enthusiasm, likewise are essentially correct. Aside from the resemblance in the amount of total nitrogen, this product is entirely different from Somatose. Over half of its nitrogen is insoluble and its percentage of fat is high; it also contains very much more of the meat bases.

MISCELLANEOUS MEAT PREPARATIONS

The eleven brands listed in Table V are very diverse preparations, and require no detailed comment. It will be noted that some of them contain alcohol in considerable amount, and in some instances that is probably the only effective ingredient. Most of these products are accompanied by claims typical of the ordinary "patent medicine," and are worthy of no more credence; on the other hand, brands like Malted Meat Extract, Armour's Soluble Beef, Peptonized Beef "Rose" and Leube-Rosenthal's Beef Solution, have distinct nutriment value. Furthermore, certain brands, such as Liquid Peptonoids, contain vegetable matter in considerable quantity.

Pepto-Mangan "Gude" is sold as a medicine rather than a food, "an ideal pharmaceutical combination for chlorosis, anemia, etc." These claims have been disputed by competent authorities, and the writer will not discuss them here. The material contains manganese and iron, probably in the form of peptonates, but the amount of the latter cannot be great, as only 0.16 percent of total nitrogen is present, and three-fourths of this is in the form of ammonia.

Colden's Liquid Beef No. 2 is essentially a dilute meat preparation, with considerable sugar and alcohol, and certain bitter principles. It is in no sense entitled to the word "beef" in its name, as it contains but 0.05 percent of nitrogen. "Its tonic and nutritive qualities are sufficient to sus-

TABLE V. MISCELLANEOUS MEAT PREPARATIONS

Brand.	Manufacturer	Alcohol by Weight.	Water and Volatile.	Organic Matter.	Ash.	Chlorin as Sodium Chlorid	Phosphoric Acid.	Iron.	Acidity as c. c. N/10 NaOH per 1 Gram.	Total.	Insoluble and Coagulable.	Proteoses.	Peptones.	Total Meat Bases.	Creatinin and Creatin.	Xanthin or Purin Bases.	Other Meat Bases	Ammonia.	Fat.
		Nitrogen as																	
[1]Malted Meat Extract of Beef	American Malted Meat Co.	0.00	13.46	55.05	5.17	0.58	1.15	0.15	0.00	4.12	3.24	0.50	0.09	0.79	trace	0.01	0.35	0.09	1.95
Liquid Peptonoids	Arlington Chemical Co.	0.00	13.46	55.05	5.17	0.58	1.15	0.15	0.00	0.88	0.00	0.21	0.41	2.63	0.05	0.09	0.16	0.05	0.06
[1]Armour's Soluble Beef	Armour & Co.	1.44	14.44	57.11	5.00	3.41	0.11	0.03	0.00	19.41	0.00	0.01	0.00	2.03	0.52	0.41	1.24	0.39	0.09
[1]Pepto-Mangan "Gude"	M. J. Breitenbach & Co.	12.25	7.11	1.98	0.14	0.03	0.03	0.11	0.00	0.16	0.00	0.01	0.00	0.03	trace	trace	0.00	0.12	0.02
[1]Colden's Liquid Beef No. 2	Chas. H. Crittenton Co.	15.63	64.82	15.98	3.57	0.96	trace	0.03	0.00	0.05	0.00	0.00	0.00	0.00	....	....	....	....	0.01
[1]Parmopeptone	Fairchild Bros. & Foster.	11.10	61.82	21.54	1.11	0.61	0.15	0.03	1.05	1.12	0.00	0.59	0.13	1.84	0.17	0.03	0.36	0.12	0.04
[1]Essence of Mutton	The London Essence Co.	....	82.00	12.84	1.16	0.84	0.22	0.04	1.89	2.61	0.00	0.11	0.62	3.19	0.17	0.03	0.12	0.13	0.09
[1]Mulford's Predigested Beef	H. K. Mulford Co.	....	72.50	23.50	1.50	0.71	0.23	0.04	0.75	0.50	0.00	0.34	0.16	1.18	0.04	0.00	0.00	0.00	0.00
[1]Murdock's Liquid Food	Murdock Liquid Food Co.	12.52	72.50	23.50	1.50	0.71	0.23	0.04	0.75	1.45	0.00	0.34	0.16	1.15	0.04	0.00	0.00	0.00	0.00
[2]Peptonized Beef	P. B. Rose.	5.40	45.45	39.55	3.00	1.63	0.13	0.04	2.93	6.88	0.87	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00
[2]Leube-Rosenthal's Beef Solution	Ph. Rudisch.	....	45.45	39.55	3.00	1.63	0.13	0.04	2.93	6.88	0.87	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00
		....	22.24	43.41	3.34	1.84	0.40	....	2.82	5.13	1.58	0.45	0.61	2.64	....	....	....	....	....

[1]Street, Rept. Conn. Expt. Station, 1908, 642, 652.
[2]Bigelow & Cook, U. S. Dept. of Agr., Bur. of Chem., Bull. 114.
*Contains 0.11 percent Fe_2O_3 and 0.16 percent MnO.

TABLE VI. BEEF, WINE AND IRON

Brand.	Made by writer, according to	Specific Gravity.	Alcohol by Vol.	Extract.	Ash.	Iron. Fe.	Total Nitrogen.	Nitrogen as Ammonia.
Made by writer, according to N. F.		1.0046	19.50	12.96	1.491	0.021	0.216	0.009
E. F. Mattison Co., Providence, R. I.		1.0181	1.19	16.04	2.357	0.122	0.228	0.014
Wm. S. Merrell Chem. Co., Cincinnati, Ohio		1.0098	16.25	16.25	0.113	0.032	0.145	0.016
John Wyeth & Bro., Philadelphia		1.0089	20.32	15.56	1.112	0.010	0.157	0.011
United Drug Co., Boston (Rexall)		1.0035	21.92	13.32	1.347	0.106	0.159	0.006
American Druggists' Syndicate, New York		1.0044	13.96	13.96	0.351	0.027	0.118	0.054
American Druggists' Syndicate, New York		1.0040	14.51	13.32	0.430	0.045	0.136	0.052
North American Remedy Co., Philadelphia		1.0187	1.24	10.04	0.251	0.151	0.111	0.036
H. K. Wampole & Co., Philadelphia		1.0100	17.60	16.03	0.253	0.088	0.091	0.022
Hance Bros. & White, Philadelphia		1.0126	1.03	13.46	0.886	0.132	0.146	0.039
The Harris Co., New York		1.0032	19.50	12.85	0.421	0.036	0.039	0.011
Irondequoit Wine Co., Rochester, N. Y.		1.0042	1.11	11.32	0.119	0.114	0.046	0.025
Prudential Drug Co., New York		1.0085	16.11	20.05	0.305	0.029	0.050	0.003
Fred F. Ingram & Co., Detroit, Mich.		1.0076	16.28	20.39	1.146	0.100	0.033	0.003
Fred F. Ingram & Co., Detroit, Mich.		1.0063	16.28	21.04	0.851	0.139	0.056	0.002
Means for 92 brands		....	21.78	23.23	2.17	....	0.277	0.127
Maxima for 92 brands		....	....	....	....	....	0.455	0.127
Average for 92 brands		....	7.20	17.00	0.77	0.115	0.144	0.043

tain the body without the addition of solid food" is preposterous on its face. Whatever nutriment it contains is due to the saccharine matter and alcohol, not to its trace of nitrogenous matter.

BEEF, WINE AND IRON

It seems appropriate to discuss this National Formulary preparation in this paper, as the essential part of a properly made Beef, Wine and Iron is meat extract. The Formulary states that the extract of beef suitable for the preparation of this material is that made by Liebig's method. The average druggist apparently does not use an extract of this grade, which accounts in part for the variable composition of the finished product. Likewise the quality of sherry wine used will influence the composition. Furthermore, many pharmacists substitute iron and ammonium citrate for the tincture of citro-chloride of iron, because of its greater solubility, and it is clear that this substitution also changes the amount of iron present in the preparation. While much of the Beef, Wine and Iron on the market is made by the large wholesale drug houses, nearly every druggist puts out a brand under his own name, so that practically there are as many nominally different brands as there are druggists. A long series of analyses, therefore, would be of little value except to the localities where the druggist does business. The following table, therefore, gives the analyses only of such brands as have other than a local use, a preparation made by the writer in his laboratory according to the prescribed formula, and the maxima, minima and average of 92 samples analyzed by the writer in 1908.

The tabulated analyses reveal the fact that save in a very few instances Beef, Wine and Iron is simply an alcoholic beverage with all the advantages and disadvantages of a preparation of that character. The alcohol ranged from 8.48 to 25.46 percent, the latter being about half the strength of standard whiskey. The extract (solids) ranged from 6.07 to 24.25 percent; this consists of the solids of the meat extract (when any is used), the syrup and the wine. Ten percent would seem to be the minimum amount permissible in a well-made preparation. The ash varied from 0.303 to 2.157 percent; in a properly made product this should range between 1.00 and 1.25 percent. A high ash generally indicates that the meat extract used contained excessive salt, while a low ash signifies that too little meat extract was present. Iron ranged from 0.025 to 0355 percent. The amount of iron present depends, of course, on whether the tincture or citrate of iron was used. The writer has shown (*Rept. Conn. Expt. Station*, 1908, 674) that where the tincture is used and the Formulary directions are strictly followed, 91 per cent of the added iron will be lost during the preparation of the Beef, Wine and Iron. The use of the citrate of iron and ammonia would undoubtedly secure a product better in every respect. The nitrogen varied from 0.018 to 0.539 percent. Just as in the case of iron, the final filtration required in making the preparation removes a large part of the nitrogen, so that a low nitrogen percentage does not necessarily indicate that insufficient meat extract was used. However, no possible manipulation of the formula, provided meat extract of good quality is used, could give a nitrogen content of less than 0.15 percent in the finished product. The percentage of ammonia, which in the writer's analyses ranged from 0.002 to 0.131 percent, depends largely upon the iron salt used, the citrate naturally giving a higher ammonia percentage. In judging the nutritive value of Beef, Wine and Iron it must be kept in mind that a large part of the nitrogen present may be due to the citrate of iron and ammonia and not to the meat extract; in the writer's analyses this averages 34 percent of the total nitrogen.

It is difficult to understand why a preparation of such doubtful efficacy should have been admitted into the National Formulary. For all practical purposes it is generally a poor grade of sherry wine to which have been added small quantities of meat extract and either tincture or citrate of iron. When one remembers how little nutritive value meat extracts possess, the small amount of this material used in the manufacture of Beef, Wine and Iron certainly cannot give that product much value as a nutrient or even as a tonic or stimulant. In certain cases the iron present doubtless might be of value as a tonic during convalescence or in certain blood disorders, but it could be obtained much more cheaply and could be used much more accurately and intelligently in other forms and under a physician's directions.

The claims made for Beef, Wine and Iron by the manufacturers are absurdly exaggerated. Two brands claimed that "one-half fluid ounce contains the strength of one ounce of beef." The strength of beef is its nitrogen, and one ounce of fresh, lean beef contains about 16.3 grains of nitrogen; these samples contained from 0.06 to 0.38 grains of nitrogen per ounce. Two brands claimed that "each fluid ounce contains one ounce of essence of beef"; if this were true the material would be essence of beef, not Beef, Wine and Iron. One brand claimed that "one tablespoonful contains the equivalent of 1½ ounces of lean meat"; this is untrue, as one tablespoonful contains only 0.17 grain of nitrogen, instead of the 25 grains claimed. Examples of such absurd and dishonest claims might be given almost indefinitely.

Speaking of medicated wines in general, Hutch-

inson states (*Food and the Principles of Dietetics*, 1906, 383): "The use of these wines can on no ground be recommended. In the first place, they are not worth the price charged for them, for it is far cheaper, and also better, for the invalid to get beef or malt extract separately and take, along with them, if need be, a definite quantity of sound wine of known antecedents. . . . The use of such liquors by an invalid on his own responsibility, or even by prescription, exposes him to great danger of becoming by degrees the unconscious victim of alcoholism."

THE KING'S DAUGHTERS' HOSPITAL AT PORTSMOUTH, VIRGINIA

From Small Beginning in an Old Residence New Structure Costing $110,000 Was Erected—Accommodations for Negroes Happily Arranged

By FLORENCE E. LESLIE, R. N., Superintendent

THE King's Daughters' Hospital stands as a monument to the generosity of the people of Portsmouth and vicinity. It was for the public, who so freely gave, that this institution was erected. Individual subscriptions were solicited through the medium of a "seven-day campaign," conducted by the board of directors. The amount raised by this method, together with $15,000 donated by the city of Portsmouth, made this institution possible.

The King's Daughters' Hospital was established in 1897 in a very modest way. Some charitable people, realizing the demands of a growing city, came to the definite conclusion that an institution for the care of the sick would be a great benefit to its people. This fact was further augmented by rather a singular coincidence. A stranger was suddenly taken ill in this city; his case was urgent, and he needed hospital attention. There being no hospital, he had to be taken into a private home by one of the charitable and benevolent ladies who later helped found this institution.

As an outgrowth of this case, and the result of conferences and meetings, the King's Daughters' Circle took up this great work. They put into effect the thoughts, dreams and aspirations of those who formerly dreamed of such an institution. To these ladies and gentlemen we owe much.

Fig. 1. King's Daughters' Hospital, Portsmouth, W. Va.

A small building was first acquired, and in this humble way the establishment of this institution became a fact. In a remarkably short time the hospital outgrew its quarters. Its directors and managers, flushed with the pride of a deed well begun, immediately sought larger quarters, and after much deliberation they bought a house that would allow them greater accommodation. Again, after a short while, the same condition arose that formerly existed; consequently additions were made to the building and accommodations for about twenty more patients were provided. This building, with its additions, sufficed only for a comparatively short period of time. The hospital was now thoroughly established; its work was commended by the public, the city and the medical profession.

At last the point was reached where patients had to be refused admission on account of lack of room. This was annoying to the hospital authorities as well as to the physicians. These conditions lasted for a period of two or three years, during which there were evolved schemes and plans for the erection of a modern, up-to-date, fireproof structure with ample accommodation for a larger number of patients. Upon the part of a few there was a disposition to go ahead; others said the plan was impossible, for there was always this one sobering question to be answered fairly and squarely: "Where is the money coming from?" The hospital had then no endowment fund, nor has it ever had.

Fig. 2. King's Daughters' Hospital. One of the wards.

Finally a scheme was uncovered whereby an appeal should be made to the people of Portsmouth (which city has a population of 50,000) to give and help raise the money. As a result of this the people were asked for money and they gave, erecting thereby a permanent institution.

DESCRIPTION OF THE BUILDING

Facing due south, the structure stands one hundred feet from the building line. This will allow, in the future, the erection of two wings running at right angles with the main building and forming a very beautiful court. At present a circular driveway, with spacious lawns, forms the approach.

The building is three stories high above a lofty basement. Two separate buildings go to make up the hospital. The larger or main building is connected by a covered passageway to the smaller annex. The main building contains all accommodations for white patients.

The smaller building, which is just behind the larger one, contains accommodations for colored patients, with nurses' quarters on the second floor.

Rough-textured brick and gray stone trimmings have been used to stand the sea air which sweeps over and about the building.

The basement floor of the main building is large and spacious. A large part of this floor is occupied by the culinary department. The laundry is also on this floor. The staff dining room, nurses' dining room, nurses' lecture room, laboratory, clothes room, x-ray room and morgue are also on this floor. The entire southern end of this floor is occupied by the engineering department, which is composed of two large low-pressure boilers and one large high-pressure boiler, the former furnishing heat for the building, the latter steam for the sterilizing room, and hot water. There are also six or seven rooms on this floor that are for servants; also there are necessary bath rooms and lavatories. There is plenty of light in the basement for all purposes.

The first floor of the main building is devoted to the executive department and the white male and female wards. These wards, two in number, flank each end of the building, and consequently are light and airy. Each ward is 22x45 feet and accommodates fourteen patients without crowding. Adjoining each are the necessary work rooms, such as bath, toilet, chart and dressing rooms. Adjoining each ward is also a room designated the "quiet room," to which the patient is transferred when he is *in extremis*. A large door leads to a porch which spans the width of the main building. This porch runs three stories and is connected by a steel stairway.

The first floor of the smaller building is devoted exclusively to colored patients. Here we have the same general arrangement as on the first floor of the larger building. The wards, two in number, although not quite as large as the white wards,

provide ample accommodation for twenty-four patients. They also have the necessary work rooms, such as nurses' office, chart room, dressing rooms, bedpan rooms, etc. Also on this floor there are two private rooms for colored patients.

The second floor of the main building is devoted exclusively to private rooms, of which there are sixteen, averaging 10x14 feet in size. The superintendent also has her quarters on this floor, her apartment consisting of a bed room, bath room and sitting room. A long eight-foot corridor runs parallel with the long axis of the building and is flanked at each end by two large porches. Four of the rooms on this floor have private baths.

The third floor is devoted to the operating rooms, of which there are two, as well as sterilizing rooms, wash room, supply closets, doctors' shower, etc. The entire west end of this floor is known as the surgical pavilion. The east end of this floor is devoted to the lying-in department. It consists of a delivery room, a small ward, a special room for bathing the new-born, and a nurses' office. There are also located on this floor seven private rooms. Additional rooms, such as bath, bedpan and blanket, and diet kitchen are also on this floor.

The second floor of the annex is used as the nurses' dormitory. It contains private rooms for senior nurses and a large ward for junior nurses, together with toilet, bath, etc. An electric elevator runs from the basement to the top floor. Electric signal lights are used, with which each room is provided.

The hospital is fireproof, the construction being of reinforced concrete. In the wards and private rooms a thin veneering of flooring has been laid; this, together with the doors, door frames and window frames, composes all the inflammable material in the building. The floors of all corridors are tiled.

All doors are wide enough to permit the passage of a bed, and all door sills are eliminated. The floors of all rooms, wards, corridors and porches are flush. This arrangement allows the sickest patient to be transferred to the spacious porches without the slightest jar or confusion, as all the beds are equipped with five-inch rubber-tired wheels.

Electric lights (the inverted system) and gas fixtures are plentifully distributed for ample lighting. A dumbwaiter runs from the main kitchen to the top floor.

The building, together with the equipment, cost $110,000.00. The architect was Mr. B. F. Mitchell, of Norfolk, Va. This hospital not only stands as a monument to its donors, but also as a memorial to the painstaking zeal and persistent interest that has been so graciously manifested by one of the physicians of Portsmouth, Dr. C. H. Barlow, who, during the course of its erection, very carefully and cautiously watched its development from crude brick, mortar, steel and other constituents into a completed building. His interest at this point spurred him to further action, and his aid in the selection of equipment was offered and gratefully received. Too much credit cannot be given Dr. Barlow for his valuable aid.

The members of the board of directors were also very faithful in the performance of their additional duties during the construction period. As the result of this supervision, we have a hospital of which we are proud, and we consider that our efforts have been magnificently productive.

Fig. 3. King's Daughters' Hospital. The operating room.

Architects Kennerly and Stiegemeyer, St. Louis, are drawing plans for a $15,000 hospital to be erected at Paris, Ill., for Dr. Roland Hazen. Dr. Hazen has conducted a private hospital at Paris for several years.

The aggregate mortality in London during the month of March from the principal infectious diseases, excluding diarrhea, was nearly 97 percent above the average.

A "tucked sheet," to obviate the possibility of accidental turning and thus transfer to the bedding what it should carry to the laundry for removal, is being placed on the market in England, for hospital use.

The Governor of Arkansas recently appointed a committee to make a wide inquiry by questionnaire and to follow this up by an intensive canvass of certain sections for the purpose of obtaining information regarding conditions and needs of the feeble-minded of that state. There are at present more than 100 feeble-minded in the State Hospital for Insane, and it is hoped that the report of this committee, followed by a publicity campaign, may result in legislation authorizing an institution for this class of mental defectives.

The
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Under domestic postage, $3.00; foreign postage, $3.50 (14 Shillings). Single copies 35 cents.

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Contributors, subscribers, and readers will find important information on advertising page 34.

The Small Community Hospital

Every person in this day of good hospitals and good doctors is entitled to good care and the best treatment during sickness, and to wise counsel and guidance to help him keep well.

There are approximately 7,000 hospitals in the United States, and nearly 100,000 doctors are on hospital staffs. Most populous communities are pretty well provided with hospital facilities, and their doctors are provided with workshops wherein they may acquire the necessary experience to enable them to serve the sick well.

But there are many rural communities that have no hospitals, communities small as to population, and so scattered that there seems a lack of cooperation and community spirit. Sometimes the leaders in these communities dismiss the matter of lack of hospitals with the statement that there is a hospital at "B," only 50 miles or so away, and that trains run frequently. They think they have the solution of the problem—but they haven't.

It is not alone necessary to have a hospital to which one may go when sick; it is also necessary to have a doctor who is abreast of the times, who is informed on modern medical methods and practices. If there is no hospital, where is the stimulus for a local doctor to study and work along scientific lines? The best of workmen will only "tinker" if his workshop is at home in the basement; it is when he has the tools and the shop, and the stimulus of association with other workmen in the same trade that he can do good work.

Will not the same principle hold true with the doctor? Will not his experience be greater, his opportunities broader, if he has a well equipped workshop? And will his results not be far better? There is nothing that will so stimulate a doctor to study and plan, to keep up in his literature, to keep abreast of what other men out in the broad world—his world—are doing, as constant association with his coworkers in a well equipped hospital.

Suppose there is a good hospital fifty miles away! What good will that hospital do if your wife or child is taken with a sudden illness that will not admit of the delay of an hour? Something must be done *now*, and if you have been in the habit of sending your patients fifty miles away to other doctors, who has acquired sufficient experience to do the necessary thing now, in this emergency? And who is there who shall be free from danger of such an emergency?

Every community of 3,000 or 4,000, living within a radius of ten miles, can support a hospital sufficient for every need. Such a hospital need not be costly in construction or in equipment—the simpler the better. If nothing better offers, rent or lease an old residence or unused store or factory; a small amount of money will put it in good order for a small hospital; $200 per bed will equip it—$2,000 for 10 beds. Most of the patients will be able to pay their way, and if the community is not a very poor one, the hospital will be self-supporting from the start. The county or town will usually pay a reasonable amount for the care of dependents whom the hospital is obliged to care for. The doctors will treat the poor without a fee.

Small towns and rural communities that have no hospital had better think about one.

Institution Libraries

At the instance of a few very wide-awake institution librarians the American Library Association has appointed a committee to form a special branch of its activities. The announcement is published elsewhere in this number.

Even very small hospitals, "homes," prisons, jails and similar institutions can and should participate in this library movement. There is no recreation so comforting, diverting and elevating to people obliged to remain idle as good reading, and even those too sick or unable to concentrate their minds on printed matter will always appreciate illustrations and pictures.

And it costs so little to accumulate a good library. Let it be known in the community that a hospital or prison can make good use of books, current magazines and any other literature, and it is surprising how many volumes will be offered. Not alone do patients and inmates appreciate a library; the nurses and attendants and the resident doctors appreciate it. It has often happened that the visiting medical staff, when the members are informed of the wish of the hospital to start a library, will offer good text books, and sometimes the medical men will give their whole libraries to their hospital under such a stimulus. And many valuable supporters have been attached by arousing their interest in the institution when they are permitted to offer their surplus books and magazines.

But it is not enough that the institution shall receive library material; there must be someone whose duty it is to index, classify and keep the library in order. The average person in institutions cannot do this unaided; the duty requires some help and some special training.

It is the purpose of this new committee of the American Library Association to stimulate interest in this work and to help untrained persons to do this work in a proper manner.

Hospitals should appoint a librarian, even though they have no library, and place the new appointee in communication with this committee, so he or she can know just how to begin the work.

Is Nursing a Profession or a Trade?

On another page of this number will be found a letter from the Acting Commissioner of Labor concerning the admission of training school pupils and graduate nurses from Canada.

It is the purpose at this time to call attention only to the last three lines of the commissioner's letter, namely, that "Nurses are not specifically mentioned in the exception, and the Department has held that nurses do not belong to a *recognized* learned profession."

For years the writer of this editorial has warned the leaders in the nursing world that they were heading their high calling toward a maelstrom of labor unionism. He called special attention to the California eight-hour law as proposed to affect nurses, and urged that this act was the parting of the ways between professionalism and union labor, and that the enactment of this law would cost the nursing profession years of woe and the hardest kind of work on the part of its best friends to undo the evil.

No one can possibly doubt the high purpose of such women as Miss Nutting, Miss Goodrich, Miss Maxwell, Miss Parsons, Miss Lawton, Miss Noyes, Miss Cooke and their colaborers, but one may seriously doubt the wisdom of their insistence that the nursing profession shall be classed with union labor as to fixed hours, fixed wages—indiscriminately for the efficient and the inefficient, and at the same time retain the high position they demand for the profession alongside the other "learned professions."

The writer of this editorial warned the leaders in the nursing profession against the folly of the California law and attempts to enact similar laws in other states, and in an editorial at the time prophesied that the time would come when the medical profession and the other friends of the nursing profession would have to join all their energies to undo the wrong.

That time is now come, and it becomes the duty of all of us to put our shoulders to the wheel and help lift the nursing profession out of the ruck in which it finds itself, and again set it upon the high plane of a "recognized learned profession."

The first thing to do is to ask for a reopening of the case before the Department of Labor, present our evidence that nursing is a "learned profession," and make our fight. The next thing is to clear our skirts of all the evidences of labor unionism by striking off our lists of demands, all reference to fixed hours, regardless of conditions, and fixed, arbitrary wages for graduate nurses without reference to their efficiency. When we have done these things there is no doubt that nursing will really be again one of the "learned professions."

The Death of Mrs. Allen

Only last month we had something to say in these columns about the "honor farm" and the inauguration of a new era in prison administration by Warden Edmund M. Allen, of the Joliet, Illinois, penitentiary.

It is with great humiliation, disappointment and sorrow that we are now obliged to announce the death by murder of Mrs. Allen, the devoted wife of the warden.

At six o'clock on Sunday morning, June 20th, Mrs. Allen was found dead in her room with a crushed skull. The apartment had been set on fire, and it was the smoke of the fire that called the attention of the officers on duty to the room occupied by Mrs. Allen. She was dead, and her body, lying on the bed, was badly burned. A negro "trusty" is under arrest.

It was Mrs. Allen who inspired the inauguration of the "honor farm;" it was she who safeguarded the movement from harm when arguments against the plan were almost overpowering it; it

was she who, by subtle, humane and unselfish ministrations, brought the prisoners to cooperate in the "honor" era; and since the "honor farm" became a fact Mrs. Allen had become its patron—let us say, its patron saint.

When it became known in the prison that Mrs. Allen had been murdered the prisoners rose in revolt—not against constituted authority, not against the warden, as is so often the case, but against the fiend who had murdered their friend and benefactor; and if those men, hardened as they are by lives of crime, had been able to get hold of the murderer, his shrift would have been short. As it was, they got up a most pathetic letter to the warden, assuring him of their sympathy and their participation in his bereavement, and attesting to their firm conviction that the blow which it has been dealt had not hurt the "honor" principle, but had strengthened it more than any other one thing could have done.

Mrs. Allen is gone; her work is done; the "honor" system in prison administration has been baptized in the blood of its martyr. We sympathize with the warden in his great loss; but it is seldom given to a human being to be of such great service to such a great cause, and there are many who would envy that noble woman in being permitted to die that a great cause might be set upon an imperishable footing and take its place among the memorable achievements of our humanitarian age. She did not die in vain.

Fire Prevention in Hospitals

More than once have we had occasion to prod hospital boards and administrators about fire protection in their institutions.

Recently, a strange reason was given by a trustee for the carelessness and callousness with which an almost criminal fire hazard was permitted to continue.

"Our hospital is a fire trap," cheerfully admitted this gentleman, "and we are consequently very watchful to see that the exits are all maintained in good order; our drill consists in the practice of emptying the hospital, so that if need be, we can get patients out quickly and safely. We can't hope to make the institution fireproof, so what is the use of deceiving ourselves into a false sense of security?"

"Do you practice getting your very sick bed patients out during these drills?" the trustee was asked.

"Oh, no; but we use nurses, interns, maids and other well people for the purpose, to go through the drill; we place them on cots and stretchers and 'make believe' they are bed patients."

It was learned from another source in this same hospital that the "fire drill" was "great fun," and that only the most agile of the hospital family could come safely through the experience of representing a "bed patient" at these periodic athletic exercises. That kind of thing isn't a fire drill; it is mere "horse play" for the young folks.

Fire drill should presuppose the breaking out of a small fire; and the first thought of all in its neighborhood should be directed toward getting it out before it obtained a harmful headway. At this stage, some of the people should be drilled to man the hand grenades, the chemical apparatus and the hose. Others should be drilled to man the wards and private rooms to see that patients are given the necessary assurances so that they will not become panic stricken. Still others should be drilled to get ready the stretchers and carts for the removal of patients, to see that the elevator, stairs, and fire escapes are clear and ready for instant and effective service. It should be the specific duty of some one to notify the fire department or turn in an alarm.

The main thing in a fire drill is to have every well person in the house "on the job," each one with some definite part to play, and to have the whole performance so well rehearsed that, no matter how great the emergency and the necessity for haste, each person will go to his or her duty instantly and without excitement, and do his and her part.

It must be well understood that, no matter how many fire contingencies may have been anticipated, when fire breaks out it will be altogether different from what was expected.

Perhaps the most important service of the drill is to teach the people to act calmly, without excitement, and to use their heads quickly.

The first recorded ambulance service of history belonged to the Hospital of the Holy Spirit, founded in Rome by Pope Innocent III in 1198 A. D. To quote from the Latin description: "There belong to the hospital certain coaches and litters for sick persons, wherein they are carried up and down in places of more wholesome air than the city, and in which the sick may be brought to the hospital when wasting away in languishing fevers."

The first segregation of lunatics into wards was at Hotel Dieu in Paris in 656 A. D. There were two wards set aside for the insane, one for women and one for men. In these wards there were only four beds, which were large enough to accommodate five persons, and an open fire was kept burning in the rooms day and night. It was the custom of the other patients in the hospital to spend long hours watching the "antics of these madmen, which served to relieve their minds of their own grievous infirmities, causing them to laugh and shout with amusement."

REPORTS OF HOSPITAL ASSOCIATION MEETINGS

Seventeenth Annual Conference of American Hospital Association—First Annual Convention of Catholic Hospital Association—Section on Hospitals of American Medical Association—Some of the Papers Read

American Hospital Association Meeting

Nearly three hundred hospital people were in attendance when Dr. H. T. Summersgill, chairman of the executive committee, called the meeting to order for the seventeenth annual conference of the American Hospital Association in the assembly hall of the Inside Inn, in the Exposition grounds, San Francisco, at 9:00 o'clock in the morning, June 22. A large part of the attendance represented Pacific Coast hospitals, and a comparatively small part were from the eastern and central west institutions.

The executive committee, made up of local hospital people, had made very pleasant arrangements for the convention, the hall was large and roomy, well lighted and well ventilated, and Miss Lydia Keller, who was so untiring in her preparations for the St. Paul Convention, had decorated the hall and had installed in the back part of it her noncommercial exhibit. The usual distracting noises that have interrupted the proceedings of so many conventions heretofore were not present at San Francisco, and the managers of the Inside Inn had used their best efforts to give the association pleasant surroundings and an opportunity for good meetings.

Most of the visitors to the convention were guests of the Inside Inn, so that the association was well concentrated personally and as a body.

There were too many distractions to allow the convention to proceed in anything like a calm manner. There were being held at the same time, in different parts of the city, the convention of the American Medical Association and the sessions of all its sections, and the convention of the three nursing associations. Beside that, the exposition was at its height, and people were in attendance from all parts of the world.

There were many exhibits in the exposition proper that were calculated to appeal to the hospital people, that, for instance, of the Public Health Service of the government, which was in reality a hospital exhibit and, under the direction of Colonel Woodward, presented many objects that the hospital people would want to know about. There was an exhibit of mine rescue apparatus made by the Western Electric Co. that attracted great attention because of its hospital angle. In the Japanese exhibit there were many objects concerning the public health, as there were also objects of similar kinds in the buildings of some of the European countries, notably Italy and Spain and France.

Tuesday morning's meeting lost no time in getting under way. The first speaker was the secretary of the mayor, who welcomed the convention to San Francisco and gave a most interesting talk on some of the health activities of that city. He dwelt particularly on the several emergency hospitals with their ambulance staffs of physicians and orderlies, and spoke of the connection of those emergency hospitals with the new San Francisco hospital.

Dr. Summersgill, chairman of the executive committee, read the president's address, in which he paid a fine tribute to Dr. Mann, and at the end of it a committee was appointed to draw up resolutions expressing the grief of the association at Dr. Mann's death, and the sympathy of its members with his bereaved family. Dr. John W. Peters, who had been a lifelong friend of Dr. Mann, was made chairman of this committee, and it was the intention to prepare engrossed resolutions, one copy to be sent to the Massachusetts Homeopathic Hospital and another copy to Dr. Mann's family.

A notable feature of the convention was that for the first time a woman presided over its deliberations during a part of the sessions, the woman in this case being Miss Ida M. Barrett, third vice-president.

The convention was notable, as a whole, for the fact that the program, as prearranged by Dr. Mann, was almost exactly carried out, there being almost no absentees among the members on the program. The spirit of the papers read was stimulated many times and raised to a point of marked enthusiasm by brisk discussion, participated in by many who heretofore have not taken part in the association's activities.

Philadelphia was chosen as the next meeting place of the association, and the Nominating Committee handed down the following officers, who were unanimously chosen for the coming year: President, Dr. Winford H. Smith, Baltimore; First Vice-President, Dr. C. D. Wilkins, New Orleans; Second Vice-President, Miss Nettie B. Jordan, Aurora, Ill.; Third Vice-President, Dr. A. R. Warner, Cleveland; Secretary, Miss Lydia Keller, Northfield, Minn.; Treasurer, Mr. Asa Bacon, Chicago.

The time of the next convention was not set, and power

OFFICERS OF THE AMERICAN HOSPITAL ASSOCIATION FOR 1915–1916

PRESIDENT,
DR. WINFORD H. SMITH,
Superintendent Johns Hopkins Hospital,
Baltimore, Md.

FIRST VICE-PRESIDENT,
DR. C. D. WILKINS,
Superintendent Charity Hospital,
New Orleans, La.

SECOND VICE-PRESIDENT,
MISS NETTIE B. JORDAN,
Superintendent Aurora General Hospital,
Aurora, Ill.

THIRD VICE-PRESIDENT,
DR. A. R. WARNER,
Superintendent Lakeside Hospital,
Cleveland, Ohio.

SECRETARY,
MISS LYDIA KELLER,
Northfield, Minn.

TREASURER,
MR. ASA BACON,
Superintendent Presbyterian Hospital,
Chicago, Ill.

was given to the incoming president and his executive committee to fix the time, it being the intent to avoid, as much as possible, conflicting dates and other conventions in which the hospital people might be interested.

During the convention, the question of a number of amendments to the constitution came up, and the report of the committee, advocating changes, was postponed until the Philadelphia meeting; it was the feeling that the members present had not given the subject of changes in the constitution enough consideration, and that since there was no hurry, and since it was felt that changes in the constitution should be made after very careful study, the matter might be left for a future date.

Some significant resolutions were adopted by the convention, one recommending to the incoming president that his executive committee be chosen from the country at large and representing the several hospital interests rather than, as heretofore, from among the hospital people in the convention city.

Another resolution was adopted, recommending to the incoming president the appointment of an entertainment committee from among the hospital people in the convention city, this committee to work under the direction of the president and his executive committee. A third resolution gave power to the incoming president and the executive committee to change the time and meeting place of the next convention if at any time during the year the fact developed that adequate arrangements for the entertainment of the convention were not being made by the city chosen for the convention. This resolution was passed before Philadelphia was chosen, so that there could not have been any personal reflection. The convention felt that for the past few years the cities chosen for its meeting place had not made the best possible arrangements for the entertainment of those in attendance. There was a definite feeling pervading the convention at San Francisco that the meetings need not be all business, but that there should be an element of entertainment so that a spirit of camaraderie could be engendered and so that those in attendance could obtain more from attending the convention by personal contact with others in the same line of work.

Still another resolution that was adopted recommended to the president the creation of a commercial exhibit for the next meeting and appropriated a fund of $500 with which to get up such an exhibit. The members felt that a properly created and conducted commercial exhibit could be made one of the best features of the association. Those in attendance felt that one of their missions in attending the meetings of the American Hospital Association was to see new things and to be permitted to talk about them with their associates in hospital work, to compare notes on the use of certain products offered for sale for use in hospitals. The members felt that hospital superintendents make up the actual purchasing power for the hospitals of the country and that any commercial exhibit of hospital supplies must of necessity be of greater interest to them than anyone else. For that reason, the desire was expressed to have an adequate commercial exhibit for the next year.

DR. WINFORD H. SMITH,
PRESIDENT AMERICAN HOSPITAL ASSOCIATION
Superintendent of Johns Hopkins Hospital, Baltimore, Md

Taking it all in all, the convention was very successful, considering the distance that must be traveled by most of the members. The expenses of the trip to San Francisco for eastern people and those in the central west were very high and a great many could not afford to go. The excitement in San Francisco, due to the exposition and other conventions, was disconcerting and diverting, but the convention did some good work; some fine papers were read and some most profitable discussions occurred.

Dr. Summersgill, Dr. William R. Dorr, superintendent of St. Luke's Hospital, and Dr. R. G. Broderick, superintendent of the new San Francisco Hospital, were most devoted to the interests of the association and provided many pleasant hours in the way of excursions and lunches for the members.

Hospital Section, American Medical Association

The Hospital Section, American Medical Association, held its meetings in the Civic Center, along with the other sections of the association, and at a distance far removed from the meeting place of the American Hospital Association, and on the other side of town from the meeting place of the various nurses' associations. The section was very slimly attended, in fact the meeting of the whole American Medical Association was not up to the usual attendance, and all the section meetings were small, but this year the Hospital Section was smaller than usual, largely for the reason that most of those in San Francisco who were interested in hospital activities and who might otherwise attend the section meeting were attending the American Hospital Association or meetings of the sections on the various clinical subjects.

But what the section lost in matter of attendance it made up in the enthusiasm of those who were present from day to day, and more than made up in the value of the papers read before the section. There were some splendid, almost epoch-making papers read, especially in the symposium on the "Hospital and Dispensary Care of Venereal Diseases." Dr. W. F. Snow, who was kind enough to get up this symposium, knew what he was doing when he chose Mr. Michael M. Davis, of the Boston Dispensary;

Dr. Robt. T. Legge, who had had much experience in the handling of venereal diseases as a public health officer in San Francisco; Dr. Calvin S. White, who had had an equally large experience in public health work in Portland, and Dr. Robert J. Wilson, superintendent of Hospitals of New York.

Dr. Spellissy's paper on "Efficiency Standards" was read with lantern slide illustrations and was a most remarkable paper, covering an entirely new method of keeping records in St. Joseph's Hospital, Philadelphia.

During the four days' sessions of the section, the house of delegates of the association, meeting in another part of the city, was discussing a proposed rearrangement of section work in the association, the result of which was that a new grouping of the sections of the association was proposed by Dr. Hugh Cabot and his Committee on Sections and Section Work, and the house of delegates finally adopted the new arrangement, which provided for four groups instead of fourteen independent sections as heretofore. The first group, called group "A," is composed of the subjects named: anatomy, physiology, pathology, bacteriology and pharmacology; the second group, or group "B," is composed of the sections on medicine, diseases of children, nervous and mental diseases, preventive medicine and public health, and hospitals. The third group, or group "C," is composed of all operating surgery, including general and abdominal surgery, obstetrics, gynecology, genito-urinary diseases and orthopedic surgery; and the fourth group, or group "D," is composed of the specialties—eye, ear, nose and throat, the skin, and three sections, one on stomatology, one on gastro-enterology and one on proctology.

In proposing a rearrangement of the sections in this way, it was believed by the committee, and agreed to by the house of delegates, that much better work could be done, a larger variety of subjects treated, and that there could be a concentrated attendance in the several groups of people interested in those particular branches; it was believed also that the attendance on the sections would be larger. It was agreed that the individuality of the sections was not to be disturbed, but that the number of sessions of each would be fewer.

In regard to the rearrangement of the Section on Hospitals, the chairman and secretary of the section were fully conversant from the beginning, with the proposals of the committee, and it was in reality based upon an exhaustive report made to the committee by the officers of the Section on Hospitals, that the committee's proposal took its present form.

Dr. L. W. Littig, of the staff of Mercy Hospital, Davenport, Iowa, was elected chairman of the section for the coming year, the secretary holding over, under a recent ruling of the house of delegates that secretaries of sections would hold office for three years. Dr. F. A. Washburn, of the Massachusetts General Hospital, is the representative of the section in the house of delegates, and the executive committee is composed of Dr. Winford Smith, Dr. L. B. Baldwin, University Hospital, Minneapolis, and Dr. H. B. Howard, superintendent of the Peter Bent Brigham Hospital, Boston.

DR. C. D. WILKINS,
First Vice-President,
Superintendent Charity Hospital,
New Orleans, La.

MISS NETTIE B. JORDAN,
Second Vice-President,
Superintendent Aurora General Hospital, Aurora, Ill.

DR. A. R. WARNER,
Third Vice-President,
Superintendent Lakeside Hospital, Cleveland, Ohio.

Hospital Supplies in South America

One of the staff agents of *The Americas*, a new trade publication got out by the National City Bank of New York, writes his paper as follows:

Dealers in optical goods and scientific instruments, photographic supplies, etc., have informed us that if they can secure representations of high-class manufacturers of pharmaceutical, hospital and sanitary supplies, they will open up departments in their stores especially devoted to those lines of goods. They see a good opportunity here for these lines of goods and our investigations convince us that manufacturers of such goods would do well to send a first-class representative for the purpose of establishing connections and inaugurating a campaign for the introduction of their products.

Practically their only strong competitors at the present time would be British manufacturers. Other competitors would be the local pharmacists putting up their own preparations. They of course have not the facilities for turning out the class of goods that some of the manufacturers in the north, specializing in these articles, have.

It would be necessary for a North American manufacturer to have here a representative who would see to it that his goods are kept on the front shelves and pushed. Persons who have used the North American article, I refer to physicians particularly, have a very high regard for them. One prominent physician who has had some experience with North American products, and likes them, tells me that his usual experience when he goes to a local pharmacy and asks for an American article, is that the pharmacist first shows him one of his own preparations. If this does not satisfy him he is next shown an English preparation and not until he refuses this are the American preparations brought out, and then only in case the physician knows that they have them in stock and insists upon having them.

The bulk of the retail business in Buenos Aires is practically controlled by three of the leading pharmacists, all of whom put up such articles as the cotton gauze and other hospital and sanitary supplies and the simple remedies in which they deal. There appears to be more money in their own articles than in the imported goods.

The Catholic Hospital Association Meeting

Marking a new era in the progress of the great and splendid group of Sisters' hospitals, one hundred and twenty-five hospital Sisters and a large number of chaplains, medical staff members, department heads and others interested in hospital activities met in St. Francis Hall, Milwaukee, at 9:00 o'clock on the morning of June 24, to inaugurate an association of Sisters' hospitals and to spend three days in the discussion of live hospital topics.

Reverend Father Chas. B. Moulinier, S. J., Regent of Marquette University Medical School, Milwaukee, was the presiding genius of the convention, as he was also the chief factor in bringing it about.

Sisters representing hospitals in nineteen states were present, as well as many members of their medical staffs and heads of scientific departments.

Father Moulinier presided over the meeting until duly elected officers were installed. The first meeting began with an address of welcome by Dr. Geo. Ruhland, health officer of the city, representing the mayor.

In the course of the meeting a constitution was adopted, following the usual form of such guiding rules, with the notable feature that it was provided in the constitution that the membership of the association should be made up of active and associate members, the active members to be the institutions, each of which should have three votes in the deliberations, the associate members to be made up of individuals interested in hospital work but not representing institutions, each of whom should have one vote.

There was a long debate at one time over the question of the limitations of the association, some of those present feeling that the association as at present constituted should be merely a local or branch association, the implication being that other states or districts or localities would create like local branches and that eventually all these branches should be aggregated into one great association. There were others who felt that this present association, while perhaps not very large, should be considered the nucleus for a far-reaching national or continental hospital association, and this sentiment finally prevailed in the name subsequently chosen, "The Catholic Hospital Association."

One of the significant discussions brought up in the convention concerned intern service in hospitals, and this came by way of one of the papers on the subject. Some of the Sisters felt that the intern situation was not just as it should be and that some definite standards should be made in regard to intern service; that if, as Dr. Warfield, who read a paper on the subject of the scientific departments in the hospital, held, the interns were to perform only the medical work in the institution, then it was necessary that there be a new group of hospital workers, possibly orderlies, who could do a far higher order of work than orderlies at present perform but who need not be medical men; and the Sister suggested that there ought to be provision made somewhere for the training of high-class male nurses, or orderlies, who could take the burden of much of the detail work off of the interns and relieve the nurses of a class of occupation that did not belong to them.

At the closing meeting, a splendid compliment was paid to his Grace, Archbishop Sebastian G. Messmer, who was, by rising vote, declared the honorary president of the association. It was declared that Archbishop Messmer had been enthusiastic in his support of the new movement and had given it every encouragement, and was in a large way responsible for the creation of the new association.

When it came to the selection of officers of the association there was an all-pervading feeling that Father Moulinier, who had brought the association to fruition, should be its first president. The reverend gentleman protested vigorously and insisted that one of the Sisters or one of the medical staff members should be president. The convention had its way, however, and the following officers were chosen:

Honorary President — Rt. Rev. Sebastian G. Messmer, Archbishop of Milwaukee.

President—Rev. Father Charles B. Moulinier, S. J., regent of Marquette University Medical School, Milwaukee.

First Vice-president — Sister Mary Joseph, St. Mary's Hospital, Rochester, Minn.

Second Vice-president—Mother Richard, St. Francis Hospital, Lacrosse, Wis.

Secretary—Dr. Maud Williams, Milwaukee.

Treasurer—Sister Marie, of Misericordia Hospital, Milwaukee.

Two Members of the Executive Board—Dr. W. E. Fairfield, St. Mary's Hospital, Green Bay, Wis., and Miss Marie Lawless, of Mercy Hospital, Chicago.

The next time and place of meeting were left to the president and executive committee.

The first Sisters' hospital meeting was a great success. Some very brilliant papers were read and there was some splendid discussion, papers and discussion that will be most profitable to the hospital people throughout the world.

Father Moulinier will make arrangements for the publication of the transactions in volume form, and those who wish copies will communicate with him.

OFFICERS OF THE CATHOLIC HOSPITAL ASSOCIATION FOR 1915–1916

HONORARY PRESIDENT,
RT. REV. SEBASTIAN G. MESSMER,
Archbishop of Milwaukee.

PRESIDENT,
REV. FATHER CHAS. B. MOULINIER, S. J.,
Regent of Marquette University Medical School,
Milwaukee, Wis.

FIRST VICE-PRESIDENT,
SISTER MARY JOSEPH,
St. Mary's Hospital,
Rochester, Minn.

SECOND VICE-PRESIDENT,
MOTHER RICHARD,
St. Francis Hospital,
Lacrosse, Wis.

SECRETARY,
DR. MAUD WILLIAMS,
Milwaukee, Wis.

TREASURER,
SISTER MARIE,
Misericordia Hospital,
Milwaukee, Wis.

EXECUTIVE BOARD,
DR. W. E. FAIRFIELD,
St. Mary's Hospital,
Green Bay, Wis.
MISS MARIE LAWLESS,
Mercy Hospital,
Chicago, Ill.

The new $80,000 St. Elizabeth's Hospital at Hannibal, Mo., was dedicated July 2.

MISS LYDIA H. KELLER,
SECRETARY AMERICAN HOSPITAL ASSOCIATION.

The Trend of Modern Hospital Service[1]

BY JOHN A. HORNSBY, M. D.,
Editor of THE MODERN HOSPITAL.

"An eye for an eye, and a tooth for a tooth," of the old Mosaic law, gave way, at the dawn of the Christian era, to the nobler sentiment of the common Fatherhood of God, and the Brotherhood of Man. The Crusaders, who gave this sentiment to the world, and injected it into civilization, were the devotees of Christianity, the standard bearers of the new religion, the brotherhoods and sisterhoods of the Catholic Church.

For thousands of years the care and cure of the sick and hurt had been predicated on the law of chattels, on the preservation of serfdom and modified forms of slavery; the military leader demanded that his soldiers be fit to fight, and he commanded that whatever was necessary or possible should be done to that end. The administrators of the fiefdoms about the walled cities of the world demanded that the women who could not fight, and the children, be kept in fit condition to plant and harvest the fields. It was an economic era, with the sole end in view of maintaining vassalage and keeping up feudalism; but there was no brotherhood of man, none of the humanities about it.

All could not be done in a day, or a year, or a century, but the sisters and monks of the then narrow Christian world spread their gospel of love and unselfishness to the farthest outposts.

Little by little improvements were made: there was better care of the sick, more kindness, more unselfish ministration, more comfort for those afflicted; not wholly for economic reasons, but because they were the common inheritors of human frailty and the common victims of disease.

The pages of history, from the dawn of the Christian era to within a hundred years ago, were filled with the devotion, self-sacrifice, dangers, hazards and helpfulness of the Fathers and Sisters of the Catholic Church.

It would not be profitable to trace the items of improvement in hospitals during that long period; let us take the more recent past.

One hundred years ago, or perhaps two hundred, there came a conflict between science and religion; a conflict that has been going on ever since, and, to perhaps a limited degree, went on long before; but within the time mentioned this conflict had taken on definite form. No longer were the humanities sufficient; there came the inexorable claims of science, not always tending to the comfort and pleasure or happiness of man.

But out of this conflict came a new order in the hospitals of the world. To humanity and unselfishness and kindly ministrations were added improvements and discoveries made in the science of medicine and the allied sciences and arts. As in most other cases where human interests and human sentiments conflict, there was a compromise; and today we are the heirs of the beneficences of that compromise. Never was humanity held higher than now; but the processes of evolution have amalgamated into that humanity the scientific achievements of our age; and today is more blessed than former times; partly due to evolution in the human family in the direction of what we have come to call "service," and partly due to scientific discoveries which have apotheosized, not the cure of disease, but its prevention.

The hospital of today that contemplates only the relief of sickness, the cure of those who are ill or hurt, fulfils only a small part of its obligation. It must prevent sickness; must keep people well instead of getting them well after they are sick.

The hospital of today is not a thing within four walls; it is not a house that shelters the sick; it is a state of mind. It permeates the whole community; out from its walls radiate all its influences. Like educational institutions everywhere, it teaches and trains those who are to minister, and these in their turn go out into the community and carry its blessings.

The hospital is a health center that takes into the homes of the people the principles of hygiene as we know them today, the laws of sanitation, the ideals of pure liv-

MR. ASA BACON,
TREASURER AMERICAN HOSPITAL ASSOCIATION.
Superintendent Presbyterian Hospital, Chicago, Ill.

[1]An address delivered before the First Annual Convention of the Catholic Hospital Association, Milwaukee, Wis., June 24, 1915.

ing, good housing, the proper rearing of children, the installation of good morals in their minds.

What a wonderful edifice it must be if such an institution is to perform these huge functions! And in order to do so there are some definite necessities, some facilities, some equipment that the modern hospital must possess itself of, and about which it must idealize and dream and plan and work.

The pioneers of modern medical science have discovered the cause of many diseases within recent years that were not long since incurable and whose beginnings were not known.

Overtowering above all other causes of disease are certain microscopic forms of life. The ancient plague that devastated Europe and Asia and Africa for ages we know now to be caused by an infinitely small organism transmitted through rodents, rats, mice, squirrels, by means of the flea, to human beings; knowing this, the plague is no longer uncontrollable, and it has ceased to be a menace to mankind.

Spotted fever that devastated Europe and destroyed whole nations, we now know to be caused by another organism; and not only is this organism isolated and identified, but the masters of pathology have created another organism that destroys the germ of spotted fever—and cerebro-spinal meningitis, the newer name, thanks to Flexner and Jobling and the Rockefeller Institute, is no longer a menace.

Yellow fever is caused by the bite of a mosquito that had previously been infected with the germs of the disease, and knowing this we can keep the mosquito away; and acting upon this process yellow fever is practically banished from the world.

Gangrenes, childbed fevers, erysipelas, the infections following wounds, all these we know to be caused by microorganisms that have been identified, studied, and with whose character and habits we are so familiar that we can guard against them.

If these things are true, and we *do* know the cause and prevention of these diseases, then the further continuance of the diseases themselves must be due to our own carelessness and indifference, or to the ignorance of the individuals who have to do with their prevention.

And this brings us down to the very moment in hospital efficiency and good hospital service. This is why we talk about bacteriology and pathology in our hospitals. This is why the doctors demand blood counts, the examination of secretions, and the tissue of abnormal growths. Are these not sufficient reasons for our extending every effort in our institutions to develop and utilize these processes of science?

And if we are to make use of the knowledge of medicine in its scientific phases, to whom must leadership be assigned? It seems obvious that we must lean upon and look to the physician, whose life work has been a study in the realm of these sciences.

Too many hospital administrators today take the ground that their own work, the physical affairs of their institutions, the cleaning of the house, the good feeding of the sick, the handling of employees, the smooth running of the physical machinery, are the all important things.

It is true that without these the whole machine would break down and that its usefulness would be at an end. But let us not forget the sequence and order of importance of the work in the hospital. First, the patient's best good; and (2) following in step with this, the carrying out the doctor's orders in his behalf; (3) the setting up and proper working of the necessary scientific adjuncts to the doctor's service, the facilities by which he can determine the nature and character of disease, and the machinery with which he must work for its cure; (4) the proper nursing of the patient, which is hardly separable from the doctor's own ministrations; (5) the physical machinery that must serve to keep the institution in proper running order; its lighting, heating, ventilation, the proper feeding of the patients, nurses and employees, the living conditions that will make their work efficient and comfortable and pleasant, conditions for social and educational association, that will add to their efficiency, the beautification of the hospital surroundings, for its elevating influence on patients and well people.

If we have given our doctors the things they need in the institution for the diagnosis and treatment of disease, they will be enabled to learn from their experiences, and improve their methods continually, and they will be able to teach those other elements in the hospital, the younger physicians and the nurses, and these again, coming in contact with the community at large, will be able to do a world of good by the education of the public at large in the things necessary to keep well, morally, mentally and physically.

So we can easily see, as we study the requirements of our hospitals, that everything goes back to the patient, and the patient leans on and goes back to the doctor; and if our institutions are to be worth while, if they are to take foremost place in our communities, the lines of improvement must be in consonance with the requirements of modern medicine.

The Educational Function of Hospitals[1]

BY LOUIS F. JERMAIN, M. D.,
Dean of the Marquette University Medical School, Milwaukee, Wis.

In order that our hospitals shall render the highest possible service to humanity they must not only care for the sick entrusted to them in the most scientific and approved manner, but must aid in the dissemination of existing knowledge concerning the origin, prevention and eradication of disease, and by reason of the excellent opportunities at hand in well equipped institutions lend all possible aid toward the enhancement and enrichment of such knowledge.

All private hospitals are quasi-public institutions, just as much as are railroads, telegraph lines and banks. Their responsibilities to the public lie not only in the efficient care of the sick, but also in the broader educational activities which tend to benefit and elevate the human race and increase human comfort and happiness.

The educational function of the hospital is therefore a function no less sacred, no less altruistic and beneficial and even more ramifying than the function of caring for the sick; one the full exercise of which will forever remove the last vestige of popular horror of hospitals and make of them true havens for the afflicted.

The educational activities of a hospital may conveniently be divided into:

1. Education of medical students.
2. Education of staff and medical profession.
3. Education of nurses.
4. Education of interns.
5. Education of the public.

Education of medical students. All hospitals in cities where there is a medical school owe it to themselves and the public to seek some teaching connection with such school. Hospital authorities should hold themselves re-

[1]Paper read before the First Annual Convention of the Catholic Hospital Association, Milwaukee, June 24-26, 1915.

sponsible in a large measure for the training of the future practitioners of medicine and members of the staffs of hospitals. If hospitals close their doors to medical students, how can they expect the services of competent men in the future? Where are medical students to get their clinical training if not in the hospital?

The hospital must of necessity be the laboratory wherein the third and fourth-year medical student does his work and receives his instruction. It is only in the hospital that he will find opportunity to apply his knowledge of anatomy, chemistry, physiology, pathology and bacteriology, and correlate his scientific with his practical studies. The hospital with students in its wards not only gives better service to its patients, but doubles its usefulness to the profession and the public.

No one would for a moment entertain the proposition to train nurses outside of hospitals, and yet hospitals expect their future staff members to receive a training which will make of them efficient practitioners of medicine, without granting them even the opportunities of a nurse. Hospitals must realize that the medical student as well as the nurse must learn his most valuable lessons in the hospital wards from the patient. They should also realize that the medical student in the hospital not only receives valuable instruction and training, but also gives to the hospital services of value often unobtainable from staff and interns. Osler says, "In the interests of the medical student, of the profession and the public at large, we must ask from the hospital authorities much greater facilities than are at present enjoyed by the students of medical schools. The work of an institution in which there is no teaching is rarely first class. There is not that keen interest nor the thorough study of cases, nor amid the exigencies of the busy life is the hospital physician able to escape clinical slovenliness, unless he teaches and in turn is taught by interns and students. It is, I think, safe to say that in a hospital with students in the wards the patients are more carefully looked after, their diseases more fully studied and fewer mistakes made." Medical students in a hospital are in a measure a guarantee of thorough work on the part of the staff and interns.

REV. CHARLES B. MOULINIER, S. J.,
PRESIDENT OF THE CATHOLIC HOSPITAL ASSOCIATION.
Regent of Marquette University Medical School, Milwaukee

Education of staff and medical profession. The hospital is pre-eminently the school for the training and development of the physician. It is the laboratory of scientific investigation and research into the clinical problems so many of which await solution.

There are problems and difficulties in the education of a medical student, but they are no less difficult than the continuance of the education of the physician and surgeon. To no class of men does the wise comment of Plato, "Education is a lifelong process," apply with more aptness.

The most important factor in the education of the physician is the patient, especially the hospital patient. It is in the well equipped and well conducted hospital where careful histories are taken, good records are kept, thorough examinations are insisted upon and all laboratory and other diagnostic refinements are available that the patient assumes the maximum of educational value.

Hospital patients should, in a sense, be the property of the hospital during their stay at the institution, and not the property of the physician who happens to send the patient, or the member of the staff who happens to be "on service."

A hospital patient is entitled to and should receive the benefit not only of the experience and wisdom of the physician in charge, but the skill and knowledge of the entire staff of the hospital. Patients should select a hospital because of the reputation and skill of its staff, all of whom are intensely interested in their condition and welfare, and with the knowledge that the services of all are at their disposal.

Entrance of a patient into a hospital should carry with it a guarantee that the medical and surgical services rendered therein are of the highest type, the representation of the most modern scientific attainments and the consummation of the combined thought and skill of the entire staff. Only under these conditions does the patient receive the highest type of service and become of value, educationally speaking, to the staff, the profession, interns and students. Such service would not only be the best for the patient, but would enhance greatly the reputation and efficiency of the hospital.

Hospitals should be responsible for the medical, surgical and obstetrical care of every patient who enters. By what right does or can any physician who seeks hospital care for his patient deprive that patient of the best services available at such institution? Every hospital should, in the interest of the patient, the public and its own reputation, demand the right to insist upon every patient receiving the benefit of such service.

The records of all patients should be available for study, comparison and compilation. The staff and interns should meet frequently and regularly for scientific discussion and deliberation, medical literature should be reviewed, hospital cases examined, diagnosed, and their pathology and treatment discussed, x-ray, post-mortem and laboratory findings studied and correlated with clinical findings. Members of the medical profession, nurses and medical students should be invited to attend these hospital meetings and conferences, and take part in the discussions.

Group of Sisters in attendance at the First Annual Convention of the Catholic Hospital Association, Milwaukee, June 24-26, 1915.

Every member of a staff owes it to himself, to the hospital, the patient and the public to keep well abreast of the advance in scientific and practical medical knowledge. In order to do this he must not only study his own cases carefully, but he must give others on the staff the benefit of his knowledge and experience, and in return receive from them encouragement, inspiration, advice and instruction in the special subjects in which they are interested and along lines which he himself has not found time and opportunity to perfect himself.

The hospital staff is the embodiment of all that is educational in a hospital, and unless the staff be composed of the right men the hospital will fail in all its educational functions. The appointment of the staff is therefore a most difficult and important problem.

Hospital staff service is a public service, and the members must not be men who seek appointment for selfish reasons. They must be ever ready to give freely of their time and energy for the benefit of the public and the profession and in the interests of education and the advancement of medical science. There can be no drones in the hive, all must work and all must share the burden of responsibility. There must be unity of purpose and action and unselfish devotion to the realization of the ideal in hospital service.

A hospital may possess the finest buildings, the best equipped laboratories, the most modern facilities, and if it has not the right men on its staff it will fail in the broader function of service to the patient, the profession and the public. The hospital with laboratories of pathology, bacteriology, chemistry and x-ray constitutes the workshop, the equipment, the tools, but neither is of much value either to patient or public unless the staff consists of men who know how to use the tools and actually use them.

The hospital staff must be made up of men who fully realize their educational responsibilities, who teach students, nurses, interns, the medical profession and the public, because of a love and a desire to impart to others what they themselves have garnered into the storehouse of knowledge and experience.

Love of fellow-men, unselfish devotion to the best service to mankind are the impelling forces of the true educator in hospital as well as university.

Education of nurses. The training of the nurse is still to too great an extent looked upon as distinctly manual, and the training school as a part of hospital service rather than an educational institution. Theoretical and practical work should be well balanced, and the nurse should not be trained solely because the hospital needs her, but because the hospital has something to give to her.

In the proper education of the nurse, all agencies available, such as hospital staff, interns, medical school, dispensary, training school and social service should be utilized to the fullest extent possible. Service to the sick no longer means only manual care and sacrifice of self, but new and ever widening activities are opened up, no less essential than personal care.

Specialization in the profession of nursing is rapidly assuming the same importance as specialization in medicine, and training schools must take cognizance of this fact, not that they should train specialists, but a nurse after graduation may assume the duties of chef, housekeeper, superintendent of asylum or sanitarium, school nurse, department store nurse, health inspector, factory and workshop inspector, milk station manager, fresh-air nurse, tubercular nurse, anesthetist, x-ray operator, laboratory technician or social worker, and her training must in consequence be one the foundation of which is a higher preliminary education than that usually required, and one which enables her to give material assistance in the solution of every health and social problem.

The training of a nurse should be a liberal education in itself. How better can you prepare a woman for the duties of married life and motherhood than by the instruction she receives in domestic science, the care of the sick, the feeding of infants, the causes of disease and its prevention and the study of social problems? Whatever the future activities of such a nurse may be she will be an influential factor in the conservation of the health of the nation as well as the happiness of its citizens.

A group of students, Sisters and hospital technicians at work in the blood room of the laboratory, Marquette University Medical School, Milwaukee. At the close of the convention of the Catholic Hospital Association a six-weeks' laboratory course for hospital workers was inaugurated. It is said that the Sisters are taking hold of the work with great enthusiasm.

Training schools fail in that they do not educate their pupils on the professional and character-building side, and hence do not attract the most desirable women. They fail because too much emphasis is placed upon the manual and not enough on the educational development which fits them for the many and varied activities now open to them.

Education of interns. This is by far one of the most important educational duties of the hospital. It has been fully discussed by Dr. Warfield in a previous paper and need only be touched upon by way of emphasis.

Hospitals must realize that intern service is but a continuation of medical training as inaugurated during the third and fourth years in the medical school, and that an intern enters the hospital not for the purpose merely of serving as an orderly, elevator man or even anesthetist, but that he expects to learn and to be given every opportunity to apply his scientific knowledge to practical uses in the curing of disease and the alleviation of suffering.

No other period of a physician's life and education is more pregnant with possibilities for development along true scientific and humane lines than this one. It is the duty of the hospital and its staff to aid, encourage and insist upon the proper utilization of all means at their disposal for the proper training and development of the intern.

Hospital staffs too frequently regard interns as servants rather than pupils and coworkers. There is not the proper cooperation nor that freedom of interchange of thought and opinion so desirable and necessary if the best results are to be obtained. Older members of hospital staffs forget that the young medical graduate, fresh from the laboratories of a modern medical school, brings with him methods and a technic which it may be wise and useful to adopt. Furthermore, the enthusiasm, energy and ambition of youth are contagious and serve to arouse many an older man from the lethargy of routine.

The chasm of "experience" which so often separates the old from the young should be bridged by closer cooperation and confidential scientific intercourse, and the result is certain to be beneficial to both.

Education of the public. The educational function of the hospital is of more recent development, but bids fair to become one of great service. Preventive medicine in its very nature is a matter largely of public education, and hospitals must assist in this work because the hospital is pre-eminently the institution with which social service work can best be conducted.

Report of the Committee on Medical Education and Medical Organization[1]

BY JOSEPH B. HOWLAND, M. D.,
Assistant Administrator, Massachusetts General Hospital, Boston.

Mr. President: Your committee begs to report as follows:

The progress in medical education and hospital reorganization which is going on so rapidly in this country is due to a large extent to the admirable analysis of our medical schools and their clinical facilities as presented by Mr. Abraham Flexner in his report to the Carnegie Foundation for the Advancement of Teaching in 1910, and to suggestions contained in a similar report on European medical schools and hospitals by the same author in 1912.

It is unnecessary for me to quote at length from these, as you are undoubtedly familiar with them. We also had the pleasure of hearing Mr. Flexner on the same subject at the meeting of this association in New York in 1911. All interested in medical education and hospital organization must be profoundly thankful for the Foundation which gave us such clear and thorough reports.

The impetus given by them is not in any sense spent and will not be for a long time, and the progress we have made this year is in line with suggestions contained therein.

TEACHING MEDICAL STUDENTS

Of the forty-one large hospitals to which letters were sent, thirty-seven answered that they were used for teaching purposes. Of these, twelve stated that during the past year changes in teaching had taken place whereby stu-

[1]Report read before the Seventeenth Annual Conference of the American Hospital Association, San Francisco, June 22-25, 1915.

Group of members of the American Hospital

dents are now admitted to the wards as clinical clerks, a most favorable showing.

Those of us present who have had medical training undoubtedly got most of our undergraduate hospital experience in amphitheaters listening to clinical lectures and perhaps wishing we could get near enough to a typhoid patient to see the "rose spot" being demonstrated; or do more than see the crayon outline of the enlarged spleen as mapped out by the lecturer. Some of us studied medicine since the once popular amphitheater lecture gave place to the bedside demonstration in which more students took part than could get near the patient's bed. How few of us had the opportunity of spending a month or more of our fourth year actually doing the ward work, rubbing elbows with the visiting physician, house physician, pathologist, chemist and interns! Once this place has been made for the intelligent student, he is missed if absent for a day. At the Massachusetts General Hospital four students at a time are given practical work for a month in a 20-bed ward.

They are under the charge of an instructor, who, if not a member of the hospital staff, is given a temporary appointment which makes him a member of the hospital family and gives him some of the privileges and responsibilities of a staff officer. He teaches the student practical history taking and oversees his work in the clinical laboratory. The student is also under the direct observation of the house physician and interns and acts as their assistant. The history he takes is examined, corrected, and is rewritten, if necessary, by the student and then becomes part of the hospital record. He makes a physical examination; takes blood, sputum and excreta to the laboratory for his independent examination. Daily notes are written by him from dictation by the intern. The student also demonstrates his cases to the instructor and his classmates. In short, he is learning medicine by doing things for his patient and not alone by hearing others talk about the case. For the past two years at the Massachusetts General Hospital we have taken advanced students as clinical clerks for periods of one or two months in the summer, and they are proving of such value that interns are very anxious to secure their services. This year the Harvard Medical School is to give credit to students for summer work done in the wards of the hospital. It is not alone to medical students of Boston that we offer this summer work, but to those in distant cities. This we feel will prove of benefit in acquainting such students with the hospital and encouraging them to apply for internships later.

FIFTH YEAR OF HOSPITAL WORK

We find that five medical schools have recently required for a degree a fifth year of hospital work and that two more are considering it. The University of California, University of Minnesota, Medical Schools of Ontario and Nova Scotia are among those now requiring the fifth year.

In Pennsylvania a year of work in a suitable hospital is required for registration to practice in that state.

It is not too much to expect that we shall have many more schools follow their lead in the near future.

STAFF REORGANIZATION

With other signs of progress in hospital work we find a rapidly growing tendency to change the old unorganized divided service into continuous services for chiefs and for the formation of committees of the staff and administration to have general oversight of the work.

One of the most conspicuous of the hospitals reporting such reorganization during the past year was that of the Massachusetts Homeopathic Hospital, whose superintendent, our late president, Dr. Wm. O. Mann, gave much time and thought to the details of the new plan, and the increased efficiency which that hospital is sure to show will be a monument to Dr. Mann's tireless devotion to its welfare and good name.

Of the 41 hospital superintendents to whom we wrote, only 11 stated that they still had divided services in all departments. Of these, 4 were not teaching hospitals.

While the more conservative hospitals are lining up in their reorganization to the newer requirements of teaching and research and obtaining continuous service of chiefs, another important question is being considered by a few of the hospitals having close affiliation with medical schools. It is, Why should not clinical professors be salaried men giving full time to their work?

Is there not enough for these men to do in teaching, clinical study and research work as well as for the professor of physiology, chemistry, pathology or bacteriology? There is no doubt, I think, but that the reason clinical physicians and surgeons today make their teaching and hospital work incidental to their private practices, is, that there is more money in the latter method. I think there is little doubt but that these men, if they could af-

Association in conference at San Francisco, June 22-25, 1915.

ford it, would prefer to devote their whole time to hospital work of one kind or another. As Mr. Pritchett says in his introduction to the Carnegie Foundation Report on Medical Education in Europe, "In just such proportion as higher standards of admission to the medical schools and higher requirements of admission to practice are enforced, in just such proportion will the body of men who compose the profession come to be actuated by the ideal of service rather than by the ideal of gain." This point of view should also be of interest to the trustees of hospitals. In the past, and too often at present, hospital trustees feel that their full duty is done if the individual patients admitted to their wards are well cared for. The spirit of the present day calls for public service; service to the mass rather than the individual, and the mass will gain only if the great teaching clinicians are giving all of their time and thought in their professional work by cooperating to the fullest degree with the men engaged in laboratory work.

The question of providing adequate living salaries for these men is to my mind the only difficult one to be met. This I find to be the opinion of the hospital superintendents generally. How may it be accomplished? Medical schools rarely have endowments sufficient for the purpose. Is it not to some degree a proper expenditure of money given to hospitals for the care of the poor? If we agree that full-time service of the chiefs of clinical departments will be of aid in public service to the public as a whole, it must equally benefit the individual.

Supposing that the money available for salaries from the school and general funds of a hospital are not sufficient, how may this be increased? Why not from fees from private patients treated in wards in the same hospital in which the poor are received? I believe this is the probable solution in this country.

It is quite outside the limits of this report to discuss the arguments for and against a private hospital in connection with a charitable institution; to speak at length of the advantages in the hospitals of some of our communities that the poor may receive but from which the well-to-do and rich are barred, no matter how much they need the agencies which may only be obtained there for diagnosis or treatment. If the hospital received the fees, instead a few men, they would provide to a considerable extent suitable salaries for the chiefs and also allow living salaries to young men who desire to do research work but who are now forced to do private practice to get a living. It would be a step in the right direction if a modification even of this plan could be more commonly adopted, namely to allow the chiefs to retain fees of certain patients sent by themselves for admission, but not permitting consultation or operating outside the hospital or to receive fees from patients coming directly to the hospital.

The Peter Bent Brigham Hospital of Boston has adopted this method. Dr. Fred T. Murphy, Professor of Surgery of Washington University Medical School, St. Louis, advocates such a scheme.

The University of California Hospital reports, "We are definitely committed to full-time pay chiefs of service as recommended by the Rockefeller Foundation. It may be necessary to have modified plans of full-time departments." At present that hospital has full-time paid chiefs in the departments of obstetrics and gynecology and in the department of pediatrics.

The professor of surgery at the University of Minnesota Hospital is a salaried man, giving free time to teaching and hospital work.

Dr. John Lovett Morse, of the Children's Hospital, Boston, writes that that institution would accept full-time chiefs in its medical department in connection with the Rockefeller Foundation.

The New Haven Hospital, in July, 1914, made an agreement with the Yale Medical School whereby its chiefs of service became full-time paid men.

Dr. Winford Henry Smith, superintendent of the Johns Hopkins Hospital, writes us as follows: "The departments of medicine, surgery and pediatrics have been placed on the full-time basis. That is, the physicians, surgeons and pediatrician-in-chief, together with their associates, are on the full-time basis. They are paid adequate living salaries not to engage in private practice. They may see patients in consultation and may charge fees, but the fee goes to the fund. They are the sole judges as to whether or not they care to see private patients; except that the hospital reserves the right to admit private patients who are unable to pay medical or surgical fees, in which case the chief of service is responsible for the treatment of the patient. We still have part-time men connected with all three of these staffs, but the bulk of their work is in connection with the out-patient department and in teaching. The full-time staff is responsible for the hospital service. In my opinion the full-time basis is ideal from every standpoint."

It is very gratifying to this committee to find so many hospital authorities adopting or discussing reorganization plans at this time, and I believe the year to come will be as fruitful of progress as has the past.

The Hospital's Duty to Medical Science for the Furtherance of Human Welfare—by Research, Production of Papers, Library and Museum[1]

BY J. L. YATES, M. D.,
Chief of Surgical Staff, Milwaukee County Hospital.

Medicine in all of its ramifications is fundamentally a learning and teaching profession: learning the normal and abnormal by observation, study and experimentation, learning, finally, the cause and exact nature of disease, moral, mental and physical, in order to make possible early recognition, prevention and alleviation; teaching of others not alone how to learn the most effective application of established knowledge, but so teaching as to give inspiration for continued improvement in methods and accomplishments of learning and teaching.

The enormous and complex medical structure that extends throughout the world is composed of institutional and individual units, each one subject to these learning and teaching responsibilities and obligations. Just in so far as a unit or a collection of units fails in the fulfilment of these obligations, by that degree is progress impeded and human welfare, moral, mental and physical, materially injured. China may be cited as an exaggerated example. There are tiny Chinas wherever there are unprogressive units, and the larger and more influential such units, the greater and more widely distributed are the consequent injuries. The greatest of these is probably moral degeneration.

A hospital as an institutional unit in this great medical structure is obligated to learning and teaching, and in order to be worthy of the name must be solely an agent in public service. It may not be conducted primarily for gain, it must not pauperize, and all individuals connected with its activities, from the executive head to the least important employee, are but servants of the same agent in the same cause working under the same obligations to human welfare, the prevention and relief of disease, moral, mental and physical. Moreover these obligations are so patent and so imperative as to make any individual therewith connected, who fails for any reason in aiding their fulfilment to the highest degree possible, a self-confessed obstruction to medical progress, and hence to public service and morally responsible for resultant far-reaching evil effects upon health, life and happiness.

The paramount special duty of a hospital in order to serve its particular purpose in the large medical development must be to afford its patients the best possible care at the least possible cost in time and money not only to the institution but to the individuals concerned, patients and servants alike. Giving the best possible care involves learning what that care is, how to give it and the teaching of others as indicated above. This involves true learning; supplementing the knowledge gained from others by the development of new possibilities based upon facts disclosed by observation and study. This is rational research in a broad sense.

A popular idea of research is the futile attempt of some unpractical idealist with too little sense to make money, to discover something at great cost that shall be utterly worthless. A better, saner conception would be to consider it as a competent curiosity to learn more than is known about any particular line of endeavor, from comparative philology to digging ditches. This should be encouraged and fostered for two reasons; the facts thus established will ultimately aid some one in knowing what to do and how to do it, i. e., learning and teaching.

Research is scientifically accurate, it demands controlled imagination, energy, patience and intellectual honesty, together with an exact knowledge of the fruits of other labors along similar lines. Thus alone may one learn how to interpret one's own and others' observations, particularly the avoidance of fallacy, that most desirable refinement of all wisdom, the knowledge of what not to do. For example, spurious research is worse than futile; dangerous at first to others because of its advertising possibilities, it is ultimately fatal to the perpetrator's scientific soul and standing, and is to a less extent but similarly harmful to those unfortunate professional brethren who have accepted its teachings and utilized them in practice.

Apply these considerations to a hypothetical case, and in an imaginary fashion test out the implied proposition that by the quality of service alone shall you know hospitals.

A patient critically ill presents herself hopefully and fearfully for admission to a hospital. What are her hopes? That she may be returned as nearly as possible to perfect health at the least cost in danger, distress, disability and dollars. If her hopes are to be realized what does this imply as the best possible care? That from the time of admission until discharged she must realize that she is not a mere case to afford passing interest or a financial asset to be forced to contribute as largely as possible by the addition of extra charges for everything excepting possibly bad air and noises. Rather must she be made to appreciate that she is an individual whose welfare every servant in the institution has the time, tact and ability to advance and with manifest pleasure in so doing. This means that her care is based upon accurate medical knowledge, that the nursing is competent because medical knowledge recognizes and demands such nursing, and for the same reason that proper food is served attractively, that orders are executed promptly and accurately and are truthfully recorded, that the equipment is adequate in nurses, interns, apparatus and orderlies, that the furnishings are in good taste and that everywhere is cheerfulness and radiant cleanliness. The working force of such an institution, superbly organized, competent, alert and prepared, diffuses a spirit of confident optimism which is promptly communicated to the patients with incalculable benefit. This institutional buoyancy is unmistakable and comes from an established precedent, a self-generating stimulus that impels individuals to do each job a little better; in short, it is the spirit of research applied to the daily tasks.

The price of this attainable Utopia is eternal vigilance against self-satisfaction, false pretenses and commercialism, all of which are incompatible with the spirit and teachings of true research, which is altruistic.

Return again to the patient: What are her fears? That her hopes may not be realized. No consideration need be given this aspect beyond the admission that in so far as those hopes could not be realized the institution fails correspondingly to qualify as a hospital according to the premises above stated. Likewise if these premises are true this institution, in failing to give the best that its limitations permit, is existing under false pretenses. This is like spurious research in its effects. The realization of such unpleasant facts is not comforting, but it is a stimulus to do better, and that is the spirit of research.

Hospital managements frequently fail to realize that

[1] Paper read before the First Annual Convention of the Catholic Hospital Association, Milwaukee, June 24-26, 1915.

their very existence depends upon the fruits of investigation, and the debt owed thereto can only partially be repaid by fostering studies that will add a mite to the sum of knowledge. When an individual refuses responsibilities and comes to the belief that the world owes him much that he has not, he usually takes what is given with a demand for more, instead of showing appreciation in action. Such an individual is usually termed a pauper and is supposed to be deficient in self-respect. An institution that depends for its existence upon the knowledge gained from the work of others and makes no attempt at repayment in kind, that institution also is a pauper. It may be materially successful, but it is just as wholly a pauper as an individual pauper, whatever be the fruits of his mendacity. By the same token the individual who seeks a cure for his disease seldom realizes that his treatment has come from the study of a host of other sufferers during life and after death, the tedious compilation of these studies and the development of knowledge from experimentation. His indebtedness cannot be discharged by any financial transaction.

This individual should gladly submit to any petty annoyances attendant upon a careful study of his ailment, and his family and friends should permit in case of death a complete post-mortem examination. It is the hospital's duty to encourage such investigations, to help in overcoming the selfish sentiment against necropsies, to provide the needed equipment and the men trained to do the work. To be sure, this costs money and brings directly no financial returns, and yet the actual value of the work is so great that no hospital can exist without it.

Investigators, in order to do their full duty, must publish the results of their studies for the benefit of others. Hence a hospital must encourage genuine contributions to medical literature, including nursing and all details in hospital affairs, and provide a library selected for the use of all its workers. A museum is in effect but a library wherein results are recorded in tissue changes, the literature of the foundations of rational therapy.

If the world's experience be a criterion, no hospital that has not stood for and aided investigations by its staff ever achieved leadership in developing knowledge, and these are the only institutions that are particularly capable of giving first-class care to their patients, for they alone are pervaded with that spirit of research which, being interpreted, means a chronic healthy dissatisfaction with existing conditions and an acute irresistible desire to learn how to effect improvement. Such hospitals achieve more than a local following and ultimately find their large reward, material returns to make more and better workers and to do more and better work, institutional prestige and authority that will give power to the example of that most effective contribution to public welfare, intelligent personal service.

THE DUTY OF THE PUBLIC TO MEDICINE

The public, certainly the intelligent part thereof, also has its obligations and responsibilities to medicine. Quality of medical service available in any community is apt to be in no great degree superior to public demand; public demand depends upon the character of popular medical information—not stupid gossip, but some comprehension of what constitutes medical service. A hospital is an educational center and if its methods and accomplishments are to be entirely worthy it cannot be self-supporting. Endowment of some type is not only absolutely necessary, it must be sufficient, not to provide an asylum for unfortunate friends of the management, disguised as employees, but to give irresistibly attractive opportunities to those capable of filling various positions. This means a lavish expenditure of nothing but personal effort all directed to the one end, better service. Thus alone can the public be guaranteed proper care, and by experience educated to an appreciation of true medical values. This appreciation must compel medical units to do better work individually and institutionally. Thus may it come to pass that public opinion will stop the exploitation of students in medical schools and pupil nurses in training schools when it is more generally realized that the inevitable outcome of these revolting results of cupidity or stupidity is still farther exploitation—of the public.

The Hospital Superintendent and the Architect[1]

BY WARREN C. HILL,
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The title of this paper is of the late Dr. Mann's own coinage, and the subject was approached by the writer, even after some months of earnest consideration, with a large degree of hesitation.

Much has been written and said of what the hospital superintendent demands of the architect in connection with the planning and erection of hospital buildings, but little, so far as I know, has been written of what the architect may reasonably ask of the superintendent.

The annual expenditure for hospital buildings in this country is enormous—Mr. Bartine says it is something like $125,000,000. This sum is a conservative estimate if hospitals for the treatment of mental diseases are included in his summary. Setting aside this class of patients as being to a certain extent involuntary, the increase in the use and patronage of the general hospital is still striking. This increase is, I believe, not alone due to the increase in population, but very largely to the constantly growing feeling among our people, that the care and treatment they receive in the hospital is not experimental, but that the hospital is a place of hope and happy achievement, rather than a place of despair and death.

One hundred and twenty-five million dollars is a vast expenditure, but even this may be said to be small, compared with the cost of maintaining the hospitals already built. Once raised and expended this first cost belongs to the past, while the maintenance is an annual and ever increasing affair. The amount and the burden of maintenance very largely depends on how and by whom the initial expenditures are made. The cause of heavy maintenance charges is very often an incomplete study of the hospital in its preliminary stages, or the lack of a comprehensive scheme for development, faulty buildings, poorly arranged or too cheaply constructed. These things lay upon the superintendent and his assistants a burden of waste and other restrictions which cannot be shaken off or avoided, and must be carried forward from year to year.

One of the best and most complete of our Eastern hospitals was begun more than half a century ago, and was so planned at the start that subsequent additions, and there have been many, one by one fitted into place like dominoes. So completely do the newer buildings supplement the older that one might think the whole had been foreseen and planned from the outset.

You, superintendents and administrators, who may feel conscious of defects in planning and organization; in short, of an unbalanced institution, struggling vainly against the increasing cost of maintenance, realize per-

[1]Read before the Seventeenth Annual Conference of the American Hospital Association, San Francisco, June 22-25, 1915.

haps that a better plan and a better arrangement of units would relieve you of much that now perplexes, and you will perhaps be inclined to envy the man who has given the best years of his life to the growth of this hospital and who recently said to the writer that "it has been a happy one."

Contemplating the situation from the point of view of a building proposition, whether it be a new plant or an addition, we have a condition which, from the first, will require on the part of the trustees, the superintendent and the architect, a greater amount of time and study than is needed for any other type of building construction with which I am familiar.

With a small hospital it is the exception, rather than the rule, that a superintendent is engaged prior to building. The moderate-sized hospital more frequently has the benefit of his advice by consultation, while he is elsewhere occupied or at liberty, but the larger hospitals almost invariably build around the superintendent; or, in other words, engage him before anything in the nature of definite planning is done.

In the first case, and in the second as well, the burden falls on the building committee, and in many instances there is some one member of the committee who has a grasp of the situation and an appreciation of the essential facts, which would make him a successful hospital administrator should he devote himself to this field instead of to that in which he has perhaps already won recognition.

The ramifications of this subject are such as to make it difficult to stick closely to our text, but to return to our superintendent and his architect, let us assume that the trustees, through their committee on building, have placed in the superintendent's hands authority for preliminary plans and the subsequent execution of the work, reserving, of course, such rights and authority as properly belong to them alone.

It is undoubtedly of the utmost advantage to select an architect who has had experience in hospital construction—I mean one who understands not only sanitary doors and coved bases, but one who knows the basic principles upon which depend the economical and efficient administration of the hospital, one who is enough of a specialist to approach the task as a new proposition, not to be solved by a repetition of what "I did at Blankville last year," but by the application of clear and well-understood principles to the existing situation.

If it be a new start, a new proposition, the superintendent can embody the results of his own experience and study to a far greater extent than is usually possible if it be an addition or extension to an existing plant.

These additions often produce for both the superintendent and the architect the most perplexing sort of problems.

It is for the superintendent, in consultation, to share with his architects the results of his special experience.

It is for the architect so to use his experience and familiarity with hospital work that the superintendent may be relieved of a large amount of the burden of details without in any way abrogating his initiative and authority.

It is to be remembered that during the planning and construction period the superintendent is often doing double duty; carrying on his own work and adding to it extra burdens and responsibilities.

Some rare characters, like the late Dr. William O. Mann, reserve to themselves all initiative and authority, carry an immense amount of detail, and figuratively inhale bricks, mortar and other essentials, gleaning from their subordinates all the various information not already carried in their minds, and do a hundred and one things in addition to their regular duties, of which their architects might relieve them. Such men may, and often do, shorten their periods of usefulness by their arduous undertakings.

It is of the greatest assistance to the architect if the superintendent has acquired the ability to read sketches and to understand the working drawings and visualize them. The superintendent who carries a two-foot rule or a draughtsman's scale in his pocket is a joy; he has an appreciation of feet and inches when drawn to scale, and whatever temperamental characteristics either party may have, they will each have a common emblem and a working tool that bridges many a gulf of misunderstanding.

Much might be written of the pleasure to be derived from the mutual interchange of ideas over a hospital problem; of the education to be derived from long hours spent in conference with large-minded men and women, who bring to the problem the results of practical experience. The frank expression of ideas on both sides may lead at times to a radical difference of opinion, but more often to a prompt acceptance of the value of the practical as against the theoretical, and in any case, to a better appreciation of each other's point of view. There are many beautiful theories that do not work in practice, and an ounce of experience will often vanquish pounds of theoretical propositions. Such should be the nature of conferences between the superintendent and his architect.

The superintendent should and generally does know what is wanted. It is his business to supply the architects with this information orally or by means of sketches; it is not necessary that he be a draughtsman; it is the province of the architect to collate and place these in proper form for further examination and study. The more often the studies can be considered, the better. Here again the architect with real hospital experience has the advantage. With his better grasp of the general situation he can prepare his plans with less revision and without the necessity of a careful scrutiny by the superintendent or the building committee on the lookout for undesirable inhabitants in the wood-pile. Step by step, as the studies, the working drawings and specifications progress, further data and information will be supplied by the superintendent. Discussion of design and esthetic features should be left as far as possible to the architect. The plan may not be his, but the exterior should be, save perhaps for the proviso that no interior advantage or useful features should be sacrificed for a mere surface appearance of beauty. There is always a beauty inherent in the useful building thoroughly and skilfully designed and carried out. A hospital should never be an ugly building, but it should be primarily an efficient and economical building in operation and maintenance. An old writer has wisely said, "Well building hath three conditions—commoditie, fitness and delight." The last should be the result of the first two.

As the plans progress further and the construction stage approaches, the discussion of details will appear; materials, partitions, floors, painting, glazing, etc., should be carefully gone over. A reasonable knowledge on the part of the superintendent of the forty-seven trades entering into the building will prevent misunderstandings and assist in the team work so essential between the two, and may prevent many so-called "architectural mistakes."

Many points will show up in the progress of the building, particularly towards the finishing, which may not have been clearly understood from the plans by the superintendent, or upon which the architect may not have clearly apprehended his requirements. It has occurred to the writer that after the plans have been completed it

would be a good idea to go over the specification with the superintendent a second time, beginning at the end and reading backwards, section by section, to the beginning. We find that to outline these in that way is often of material assistance.

One may well ask how the superintendent can be expected to know his own profession, be a financier, an administrator and many other things, and, in addition, have a working knowledge of another profession. It is much to expect and yet there are many such.

It is not to be expected that all of the details of the several departments of the institution entering into a piece of work can be furnished by the superintendent, and the heads of his various departments must supplement his general knowledge with the minutiæ. The method of transmission varies; from one standpoint it is well that it should come through the superintendent, or at least be stamped with his authority or approval. One of the writer's happiest recollections is in the nature of a round table composed of the superintendent, the active member of his building committee, the architect, chief engineer, superintendent of nurses, dietitian, etc. They may not all have been present at one time, but the four first named were at all conferences. The results obtained in this particular case were accomplished with the minimum amount of friction, and proved satisfactory to all parties.

We have heard of building committees who keep a check on the superintendent, because he or she may be extravagant. I have never met one who could not be trusted on this account. Many of them spend most of their time during the preparation of plans and during construction, studying means to keep the cost down to minimum and will often argue, for economy's sake, to do without many things which they know would add to efficiency, which they know must eventually be needed, and the omission of which they feel to be temporizing with the situation.

At this point the experienced architect can and should stand firmly for essentials in equipment and accommodation. He must not let necessary things be neglected, even at the risk of being thought extravagant. When the need appears and begins to be keenly felt, the trustees are apt to ask why he did not insist upon what he knew to be necessary.

To sum up my ideas of the relations between the superintendent and the architect, it may be said that the architect is primarily the constructor, and to his knowledge of construction and practical details of building and of the esthetic conditions, due deference should be paid; that there are certain broad principles of arrangement and mechanical operation in which he should be an expert and which the superintendent will gladly leave to his judgment; that the superintendent, as an expert in the care of the sick and the administration of the hospital, does know his needs, and should be supplied with the conveniences he demands; that the experience of the one may and should complement the knowledge of the other, and that each should respect and give fair and reasonable consideration to the views of the other. If this is done, there need be no conflict, and the results will be satisfactory.

Hospital Equipment[1]

BY LOUIS M. WARFIELD, M. D.

When one has been living in the midst of hospital affairs for many years one reaches one of two attitudes. Either one's early enthusiasm for the best, as the result of opposition, dies out, or the very opposition stirs him to renewed and repeated efforts. For the former attitude there is routine and retrogression, for the latter there is power and progression. If I seem hard or criticize too severely in my attempts to formulate a few guiding principles, do not hold it against me. We are all working for the common good and I am giving you my ideas.

It is self-evident that when we ask what constitutes adequate hospital equipment we must modify our conceptions to fit various conditions. There are representatives here from hospitals of every size, hospitals alone in communities, hospitals among many others in large cities; small, medium-sized, and large hospitals. Obviously an equipment which might be sufficient for one hospital would certainly not be adequate for all hospitals. Then, too, the matter of private, semi-private and charitable institutions has some bearing on the question. And, finally, the question of interns working in the hospital as residents must be given consideration. This meeting here, giving a stimulus to Sisters to take up laboratory work and making it probable that some may take the full three summers' work, bids fair to revolutionize your ideas of what hospital equipment should be.

The problem thus, as you see, is not a simple one of "two and two make four."

The question which naturally will be uppermost in your minds is, what is an adequate equipment for our individual hospital so that it may render to the patients the services to which they are entitled? This is no easy question to answer. I am supposed to enlighten you. I shall be fortunate if I excite in you a curiosity to know more about real hospital equipment. I think that we lose sight of the fact that one of the chief functions of a hospital is to provide a well equipped organization for the study of disease. There must be people who have disease to occupy beds in the hospital.

There is no doubt of the changed attitude of the public toward hospitals. Not so many years ago it was difficult to persuade a patient to enter a hospital unless he were driven helpless in an ambulance in order to have some operation performed. Today it is not so hard to convince patients that a careful study of their cases demands a hospital sojourn. But how much does the patient gain if the hospital has no equipment for the study of disease, no special instruments, no special appliances, no one who can use the apparatus? I do not intend to cover the whole subject of hospital equipment. I am concerned only with hospital equipment in the narrow sense of apparatus and accommodations for the diagnosis and treatment of patients. Even thus limiting the field of discussion leaves me more to say than I can well say in a limited length of time.

Let us make a few general observations. It is safe to affirm that few if any hospitals in the land lack the ordinary tools to perform operations. Surgery being the most striking and most psychologically marvelous side of the practice of medicine, as well as being the most remunerative, is always quite well cared for in the most ill equipped hospitals. In such hospitals a microscope would be an unheard-of extravagance and a blood counter and blood pressure apparatus would be superfluous. Whose fault is it? Is the staff to blame or are the administrative authorities to blame? Both, I believe. No hospital is better than the head of the attending staff. On the other hand, nothing can be done by the most enthusiastic staff leader if he is blocked at every turn by the cold shoulders of the administrative side. Your hospitals are, almost invariably, surgical shops where people are brought, where some more or less clever carpentry is performed on them,

[1]Read before the First Annual Convention of the Catholic Hospital Association, Milwaukee, June 24-26, 1915.

where they are kept a while and whence they are sent out more or less improved in health. No attention is paid to the finer diagnostic methods. The motto might well be, "When in doubt, cut." The wild scramble on the part of most of the profession of medicine to become famous surgeons rather helps and urges along that attitude in a hospital. But those in charge are not altogether blameless. A surgeon wishes some special instruments to perform operations according to Z's method. The expense may be fifty or one hundred dollars. An internist also wants a few instruments in order to study his patients and make more accurate diagnoses. Which one usually has his request granted? There is the kernel of the nut. And yet it is just as important for the surgeon to know the functional capacity of the kidneys, let us say, as to know how to take out an appendix.

Suppose we lay down a few basic principles in hospital equipment.

First, the surgeon should have only his share of moneys put aside for purchase of instruments.

Second, clinical laboratory instruments and equipment are more important than marble-lined and nickel-plated operating rooms.

Third, assistants, nurses, orderlies, scrubmaids, are just as necessary in the laboratory as in the operating room. Where surroundings are slovenly, usually one does not rise above them, and slovenly work results.

Fourth, the unused coal bin, store room, or fruit cellar is no place for a hospital laboratory. It is in the laboratory that a large part of the work is done which enables you to find out what is the matter with a patient so that you may know what to do. Why not make it as attractive as the place where you do the therapeutic work?

Fifth, laboratory work must be consecutive, not sporadic; and to be such must be presided over by some one trained to do that sort of work. It may be necessary to pay some one a good salary to take charge of the department. A cheap, poorly trained laboratory assistant in a hospital is not only a poor investment, but a dangerous one from both the hospital's and patient's standpoint.

Sixth, a hospital which pays no attention to the accurate study of disease, but simply takes care of sick people, is not a hospital in the real sense of the word; it is a boarding house for the sick.

Seventh, the closer the clinical laboratory is to the patients the more surely will the work be done. To the Lord a thousand years may be as one day, but to man every minute counts.

Every hospital, even the smallest, should have a well equipped clinical laboratory. I do not mean a room where urines are tested for albumin and sugar, and sputum examined for tubercle bacilli, but a space where stained blood smears can be studied, and all secretions and bacteriological cultures, including blood cultures, can be examined. Certain tests which have been proven of value, such as the phenosul-phonephthalein, should be performed. There should be some provision made for post-mortem examinations. In larger hospitals there should be a well equipped pathological laboratory in addition to small clinical laboratories on every floor convenient to the wards of the hospital. In some room near the operating room there should be a frozen section microtome outfit so that tissue from operations may be examined at once. Of course all this costs money. There must be trained persons to make use of the equipment—more money to spend. We are trying to save human life, and how valuable is a human life? Think of that side of it.

The chemical laboratory must not be forgotten, where protein and non-protein nitrogen determination can be made in urine and blood, and where the amount of glucose in the blood can be determined, etc.

Then there is the expensive x-ray outfit, which no hospital of any size should be without. And in the equipment we should consider the interns, the resident staff. These men should be able to do a large part of the laboratory work. It will not be long before all graduates from the good schools will be able to perform the more specialized chemical tests.

Thus, briefly sketched, is a suggestive program for the laboratory equipment. As has been said above, much depends upon the attitude of those on the visiting staff whether or not the laboratory side is encouraged. Earnest cooperation between the staff and the hospital authorities and appreciation on both sides of what a real hospital is are absolutely necessary for the furtherance of accurate, scientific work.

Finally, I might sum up all I have to say in a few words: study your hospital, study its particular needs, keep in mind the factors which determine whether a building in which ill people are cared for is a hospital or boarding house; do what you can now, and ever look forward to do better. Never be satisfied with your hospital. Satisfaction is mental stagnation. Be constantly on the alert for improvements. Seek new methods, new appliances, new blood to use the methods and appliances. Encourage the young, well-trained doctors to work in the hospital. Keep your garden weeded and encourage the rare flowers. It may cause some heartaches, even bitter feeling, for weeds have at times deep, strong roots. The hospital is a permanent institution and man's stay is brief. The institution and the patients must ever be uppermost in your minds. Fight constantly for advance so that you will not retrogress.

The China Medical Board of the Rockefeller Foundation has completed successful negotiations for the purchase of the Union Medical College and Hospital of Peking, the price agreed upon being about $200,000. This hospital is said to be the largest and best equipped in China, and the medical school the only one recognized by the government as qualifying graduates for the practice of medicine. The college was formerly owned by the London Missionary Society and was supported by six missionary societies. It will be leased by the Chica Medical Board to 13 trustees, of whom 7 will be members of the board and 6 will represent the missionary societies which formerly supported it. Its support and endowment will be undertaken by the China Medical Board, and it will be a nucleus for educational and medical work in China to be undertaken by the Board. Dr. Butterick, Dr. Simon Flexner, director of laboratories of the Rockefeller Institute, and Dr. William H. Welch, professor of pathology in Johns Hopkins University, will sail for China early in August and remain there for some months to organize the work contemplated by the China Medical Board.

The Haskins Hospital at Wheeling, W. Va., established twenty years ago by Dr. Thomas M. Haskins and conducted by him until recently, has gone out of business. The present abundance of both public and private hospital facilities in the city and the fact that the Haskins Hospital has always been operated at a loss are the reasons given for the closing of the institution, which was established at a time when hospital accommodations were badly needed. The Haskins Hospital had a capacity of fifty beds. About seventy-five nurses have been graduated from it.

CURRENT HOSPITAL LITERATURE

ALBERT ALLEMANN, M. D., Foreign Literature.
Army Medical Museum and Library, Office of the Surgeon General, United States Army.

The Speech Clinic at St. Thomas's Hospital. The Hospital, London, 1915, LVIII, No. 1508.

The results of the first year's work for stammering children show a marked success, and the "Speech Clinic" has become a small but invaluable feature in the hospital's work. The children attend the clinic but twice a week, and although control is rapidly gained, the suggestion is made that daily treatment would give infinitely more speedy results.

The Obstetrical Nurse. Sara B. Rowen, R. N. American Journal of Nursing, 1915, XV, No. 9.

Reference is made to the intolerance so often found among nurses toward obstetrics, and the reason given is that they view it only from the standpoint of labor. A plea is made to give obstetrics its proper place in the category of nursing, and not rob it of its ideals. While acknowledging obstetrics to be a laborious specialty, stress is laid on the fact that it is replete with new problems, new interests and delightful associations and yields unusual compensations.

London (Royal Free Hospital) School of Medicine for Women—Scholarship Given by Her Majesty, the Queen. The Lancet, London, 1915, I, No. 21.

This scholarship, amounting to $250 a year for five years, is part of a gift to the queen from the wives of Freemasons to help members of the professional classes who may be in difficulties owing to the war. The council of the London (Royal Free Hospital) School of Medicine for Women will award this scholarship to a student who has passed the London matriculation examination or its equivalent and intends to begin a course of study next October.

The South African Ambulance Hospital at Cannes. The Lancet, London, 1915, CLXXXVIII, No. 4788.

South Africa, in spite of the recent rebellion and strenuous campaign in German Southwest Africa, has organized and equipped this hospital for the French Service de Santé. It has accommodations for 200 patients, is fully equipped for x-ray and bacteriological work, and has in addition to a staff of 3 surgeons, 10 nurses, 9 sisters, 6 dressers, 1 accountant, 1 secretary and 4 motor drivers, a fully qualified dental surgeon in charge of the dental surgery.

Traveling School Hospitals and Clinics. The Hospital, London, 1915, LVIII, No. 1512.

This "traveling school hospital" has a staff of two medical men, a dentist and a nurse, and operates in parts of Australia where there are no resident doctors or dentists. More than 2,500 children were treated during the first four months. The excellent results of this undertaking have led to the recent establishment of a traveling ophthalmic clinic. These institutions on wheels are the latest outcome of the advanced systems of state education in Australia.

The Tuberculosis Problem and Section 1142 of the Penal Code of the State of New York. S. Adolphus Knopf, M. D. New York Medical Journal, 1915, CI, No. 24.

Dr. Knopf estimates the annual deaths from tuberculosis in the United States to number 150,000, with a total annual financial loss of at least half a billion dollars, not including expenditures for hospitals, sanatoriums, clinics, dispensaries, colonies, preventoriums and other agencies devoted to the solution of the tuberculosis problem. He concludes this address, delivered before a meeting of the Committee on Birth Control, recently held at the New York Academy of Medicine, with the following statement:

"I do not know the penalty to be visited upon a physician who offends the majesty of the law as set forth in section 1142 of the penal code above referred to, but I am willing to take the responsibility before the law and before my God for every time I have been counselled, and every time I shall counsel in the future, the prevention of a tuberculous conception, with a view to preserving the life of the mother, increasing her chances of recovery, and last, but not least, preventing the procreation of a tuberculous race."

Italian Pavilions and Barracks (Padiglioni e baracche italiani). Riv di ingegneria san., Torino, 1915, XI, No. 6.

The author calls attention to the fact that the movable pavilions and barracks in use in Italy are mostly all imported from foreign countries, while very good structures of this class of buildings are manufactured in Italy. These structures are made of wood, are easily transported and put up. They have double walls, the enclosed air space insuring warm rooms during cold weather. The pavilions have rooms for 12 beds. The article is accompanied by a number of illustrations, showing various designs for small hospitals, isolation pavilions and open-air schools. Similar structures are also put up intended to serve as bathhouses, kitchens, etc.

Temporary Barracks on the Grounds of the Wilhelmina Hospital at Amsterdam (Nood-barakken op het terrein van het Wilhelmina-Gasthuis te Amsterdam). Dr. J. Kuiper. Ziekenhuis, Amst., 1915, VI, No. 2.

At the beginning of last August it was greatly feared that the city of Amsterdam would have to stand a siege and the authorities had to seriously consider the question of taking measures against infectious diseases, which under such conditions form one of the chief public dangers. The board of health decided to erect nine barracks for patients and five double barracks for the personnel on the grounds of the former Wilhelmina Hospital. Each barrack was built for 40 patients. Between each two barracks there is a distance of 10 meters, which was thought sufficient to isolate smallpox patients. To lessen as much as possible the contact between the personnel of the various barracks the entrances of all the buildings were made on the same side. These temporary barracks were erected in ten weeks at an expense of 102,593 florins ($43,600).

Reeducation as a Factor in the Treatment of Dementia Præcox. Edward F. Leonard, M. D. Interstate Medical Journal, 1915, XXII, No. 6.

The Jacksonville State Hospital conducted a school for the reeducation of dementia præcox patients covering a period of five years. A moderately violent ward was changed to one of the best in the hospital, and many of the patients showed sufficient improvement to be allowed

to return to their homes. The "teacher patient" was discharged as cured and has been earning a good living for his family for several years. Dr. Leonard gives an interesting account of the small beginning, slow progress and ultimate gratifying results of this experiment to emphasize the feasibility of reeducation as a factor in the treatment of these patients, comprising about one-third of the inmates of our state hospitals.

Antitubercular Institutions in Italy: The Open-air School at Bergamo (Istituzioni autitubercolari italiane: La scuola all' aperto a Bergamo). Tubercolosi, Milano, 1915, VII, No. 7.

A few years ago a teacher of the public schools took his class from a dingy, unsanitary school room out on the splendid old city ramparts. All the children belonged to the lower classes, many were sickly and predisposed to tuberculosis. Teaching in the open air had a remarkable effect on these children. They behaved better, were more diligent and at the end of the school term passed a better examination than at any time before. But more important is the fact that the children looked much better and enjoyed far better health than in their former dingy surroundings. These favorable results induced the city authorities to establish special open-air classes for weakly children and those predisposed to tuberculosis. A large open pavilion was erected for this purpose. For children who live at a distance the city pays the street car fare. A lunch for all the pupils is furnished at public expense.

Radioscopy With the Third French Army. A. W. Mayo-Robson. The Lancet, 1915, CLXXXVIII, No. 4783.

Lieutenant-Colonel A. W. Mayo-Robson, R. A. M. C., C. V. O., F. R. C. S., recently visited France for the purpose of installing the Urgency Cases Hospital, and gives an interesting account of the excellent arrangements for carrying out radioscopy in the scattered hospitals near the front. The outfit consists of a van body, divided into two compartments, the inner a completely equipped photographic dark room for developing x-ray plates, the remainder ingeniously fitted to carry all required appliances and stores. This van is mounted on a powerful motor chassis, and one of these "radiologic automobiles" can thus do the radioscopic and radiographic work for a considerable number of hospitals, where a permanent installation would be impracticable. The electricity for the x-ray work as well as for lighting the interior and exterior of the car is generated by a dynamo driven from the motor.

Hospitals and Hospital Physicians in France (Ueber Krankenhäuser und Krankenhausärzte in Frankreich). Dr. P. Schober. Reichs- Med.-Anzeiger, Leipzig, 1915, XL, No. 4.

All the public hospitals of Paris are under the administration of the Assistance Publique de Paris, which has its offices in the center of the city near the Hôtel de Ville. There are about thirty large and small public hospitals in Paris, of which the Hotel Dieu, the Hôpital St. Louis, the Charité, Pitié, and Salpétrière are the best known. Each hospital has several completely independent divisions of about 100 beds each. Thus the Hôpital Tenon has eight "services" for internal medicine, three for surgery and one for obstetrics. The Assistance Publique is intimately connected with the university. The university clinics are merely hospital divisions, for which the Assistance Publique furnishes a lecture room and a few laboratories. The university professor is necessarily also a physician in the service of the Assistance Publique. Until ten years ago the nurses at the public hospitals were sisters of charity, but when the separation of church and state was carried through they were replaced by secular nurses and the Assistance Publique has established a school, where girls are trained for the profession of nursing free of charge.

The Assistance Publique does not supervise the hospitals alone; the care of the old people, the incurables and cripples and the foundling houses stand under its administration. For these latter purposes no less than 15,000 beds are at its disposition.

From this it is seen that the Assistance Publique de Paris is a powerful institution. It employs more than 1,000 administrative officers, 8,000 nurses and 2,000 permanent laborers. There are 270 public physicians, more than 350 assistant physicians (interns) and 1,000 externs at its service. It spends about 70 million francs ($14,000,000) every year. Only a small amount of this sum is collected from patients, as there are few pay patients in the public hospitals of Paris. The institution is supported by large endowments, which have been established in the course of centuries. A certain percentage of special taxes and fees are also set aside for the hospital service. Besides the public hospitals Paris has a great number of other institutions which have their independent administration. Among these may be mentioned the Hôpital Pean, the Isaac Pereire Foundation, the Rothschild Hospital and a few hospitals owned by the Catholic Sisters. There is also an English and an American hospital in Paris. Finally there should be mentioned a great number of private hospitals, where the patients pay from 25 to 100 francs ($5 to $20) per day.

Hospital Efficiency From the Standpoint of Hospital Trustees. Walter Wesselhoeft. Boston Medical and Surgical Journal, 1915, CLXXII, No. 21.

Hospital trustees' responsibility, today, is held to be distinctly for efficiency in administration, but the prediction is made that the time is not far distant when they must cease taking for granted efficiency in the wards. The questions are asked, "are the trustees in any way prepared to keep a watchful eye on the efficiency of the staff?"; "is it called for and is it possible?" The real meaning of such a step is briefly stated to be the application of "methods for the elimination of error and of comparative therapeutics." While fully cognizant of the extreme difficulties in the path of such a reform, the belief is expressed that sooner or later the profession will awaken to its need, and the first move should be the "framing of rigid rules and their faithful observance both of control and record."

The Children's Hospital at Verona (L'ospedale dei bambini a Verona). Rivista ospedaliera, Roma, 1915, VI, No. 3.

This new hospital has just been completed. It is located in healthful, beautiful surroundings, on a hill north of the city of Verona. The hospital consists of five large buildings. The first three are connected with each other by spacious glass-covered corridors and subterranean galleries. The first pavilion is a two-story building. The first story contains the reception room, a waiting room for the public, a room for diagnosis, a hall for orthopedic gymnastics and rooms for the surgical and medical clinics. Two stairways lead to the second story, which is divided into two sections. One contains the administration offices and dwellings for the physicians, the other the medical library, rooms for chemical analysis, microscopy, etc. There is also a small juvenile library for the little patients.

The third pavilion is the largest and most important. It has also two stories. The lower story is devoted to surgical, the upper to chronic internal diseases. In the central portion of the building are several rooms containing 12 beds each. There are also several smaller rooms

with one or two beds each for patients with contagious diseases. This pavilion has two vast terraces for the children who are not able to go down into the gardens. The two other pavilions, which are not connected with the three first ones, are intended to receive the patients with diphtheria, scarlet fever and measles. They are built on the same plan as the former. This new children's hospital is said to be the finest and largest of its kind in Italy.

Hospitals in Egypt. Dr. F. M. Sandwith. The Nursing Times, London, 1915, XI, No. 527.

The cholera epidemic in 1884 brought to light the terrible unsanitary conditions of hospitals and the barbarous treatment meted out to the insane in Egypt. Dr. Sandwith found institutions swarming with vermin and mentions one hospital with its kitchen in close proximity with cess-pools, whilst the only available water had to be carried upstairs in goat skins. The insane were often left naked, beaten, half starved and some were burdened with heavy chains at wrists and ankles. A new sanitary department was organized that immediately insisted on the abolishment of barbarous treatment of patients and the inauguration of reforms in sanitation and equipment. Egypt now has an Institute of Hygiene, and twenty-four hospitals with dispensaries and bacteriological laboratories.

Psychopathic Hospitals and Prophylaxis. Franklin E. Williams, M. D. Boston Medical and Surgical Journal.

The laws on the statute books of Massachusetts providing for the temporary care and voluntary admission of patients in the early stages of mental disease have not proven efficacious outside of the metropolitan district of Boston. Lack of proper facilities in the immediate neighborhood and misconceptions of the purpose, action and class of patients advantageously served by these laws on the part of the general practitioners render them incapable of serving the splendid purpose for which they were conceived. Dr. Williams suggests that psychopathic hospitals should serve as prophylactic and educational centers to which those suffering from psychoneurosis and the early stages of mental disease could be taught to come freely and without prejudice for advice.

Care and Treatment of Tuberculous Patients in Public Hospitals (Ueber die Unterbringung und Behandlung der Tuberkulösen in öffentlichen Krankenanstalten). Dr. N. von Jagic. Oesterreich. San.-Wesen, Wien, 1915, Beiheft No. 3.

Austria has very few tuberculosis sanatoriums where patients with small means can be treated. It is therefore necessary to care for such patients at the public hospitals. This is of course wrong, but it is hoped that the future will bring changes in this respect. In the meantime the hospitals can do much, by proper organization, to mitigate the disadvantages of these conditions. Isolation of patients with pulmonary tuberculosis is an absolute necessity. Though the infection in most cases takes place in early childhood, infection of adults in hospitals is not impossible. Phthisics in the end stages must also not be left in the tuberculosis ward. They should be placed by themselves in a small room to save the other patients from the depressing sight. For tuberculosis patients those rooms should be selected which have the most air and the most light. The treatment of tuberculous patients in a public hospital in the center of a great city can never be very efficient and cannot compare with the open-air treatment of sanatoriums. Among the methods of treatment tuberculin therapy is still the most useful.

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DEPARTMENT OF NURSING

MARY M. RIDDLE, R. N., Editor,
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Progress in Nursing[1]

BY HARRIET LECK, R. N.,
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It is a simple law of human development that people get on sanely and soundly only about as fast as they grow in likemindedness, in ability to *feel* and *think* and *act* together. From age to age progress has been made only as the world has renounced its independence and taken on bonds.

Just so it must be with any real progress made in the profession of nursing. We must determine to renounce some of our pet schemes, perhaps, in order to work for the greater good of all concerned. In other words, we must bear and forbear with each other as individuals and as organizations if we would ultimately reach the greatest number of people with the most good.

At this particular period of the world's history the nations are looking upon the nursing profession with new interest, and it might be well for us to pause and think. For, even as in the Crimean war, this may mean much in the advancement of our profession; and we are reminded of the secret of the wonderful influence of our founder, "The Lady of the Lamp." In trying to show the nurse "of how much use, unawares to herself, may be the simplest word of soothing, of comfort, or even of reproof," she says, "if she wishes to do this she must keep up a sort of divine calm and high sense of duty in her mind—this is the spirit of prayer which leads us in all our nursing silently to think of Him and refer it to Him." There was no secret about Florence Nightingale's religious spirit. I would ask how much of that same spirit are we putting into the solution of our problems today? Each individual, committee or organization has its own opinion of the solution of some problem, all working separately, perhaps, and failing to see any good in the other's solution. Isn't it quite time for us to get together, to feel and act and think together, to feel our dependence on each other?

As heads of hospitals and training schools we have yet many momentous problems. It is well for us to "make haste slowly," to ponder and weigh what the outcome may be, to take a broader outlook and await developments, to cooperate.

The classification of nurses and training schools has been studied, and much valuable time and energy have been given to its solution by many of the brainiest men and women of our associations. Its wise and just solution is tremendously important to special and struggling hospitals. The solution of this problen will come in the next few years, no doubt, when we are ready for it, so why worry about it? Why not await developments? These conferences should mean much towards its solution. Within the next ten years it will work out its own salvation in a perfectly sane way and we will look back and wonder why we were so "stirred up" about it. Many difficulties will vanish when the "get-together" spirit prevails.

The primary aim of a hospital is the care of its patients. Is this fact ever lost sight of by the red tape of the administration? The ever increasing demands of service in the hospital have thrown a greater burden on the school. The schools have tried to meet the demands placed upon them by extending the course of training, by the reduction of duty hours, by placing the instruction in the hands of salaried instructors, etc., all of which has contributed to bring the schools to a standing equal to that of schools of medicine, law, pedagogy, music, etc. These schools are endowed and do not bring in any income. Why should schools for nurses?

It is upon the economy and efficiency of the training school for nurses more than any other department that the reputation of your hospital depends. Dr. Hurd recently said that a well conducted training school should be a source of expense rather than a source of income. The authorities of training schools frequently take a one-sided view of their department and have too circumscribed an outlook.

On the other hand the superintendent of the hospital, in the multiplicity of his or her duties, frequently takes too narrow a view of the value of the broad training of the pupil nurse. He perhaps is inclined to blame the nursing department for something that could be remedied only by more instruction, more supervision or more nurses. He perhaps has not the time to look into some proposition, but throws it aside and says it is of no value or that it is too expensive, when careful consideration and time spent on it might lead him to not only look with favor upon its adoption, but to realize its value later to the reputation of the hospital as well as in dollars and cents. There can be no progress made in this instance without the cooperation of both individuals, the careful consideration by each of the other's opinion, the dependence on each other and the learning to act and think and feel alike on these vital things which mean so much to the progress of the school as well as to the hospital—the school dovetailing into all administration work and both cooperating for the good of the patient.

The lack of supervision of pupil nurses is a waste to any hospital or training school. The workmen of any large business concern have very careful supervision at all times. Is it any less important where life and death are at stake? In a discussion at the last convention of the American Nurses' Association the suggestion was made that there should be one graduate nurse to every eight pupil nurses. This ratio may be too high, but is it economy to place a pupil in charge of a ward of from twenty-five to thirty patients and expect the work to go on smoothly at all times, when nine out of ten nurses have not the necessary executive ability to manage that number of patients and the work entailed, to say nothing of watching the work of the other nurses?

The strict adherence to a preliminary term for probationers is economy. At first this was met with disapproval; now no training school of any standard is without it because its value has been tested, tried and proven. Pupil-specializing is an economy because it adds to the training of the nurse and to the reputation of the hospital, which naturally follows.

The class schedule of studies taught by a paid instructor is an economy because it teaches the nurse the technical part along with the practical, thus resulting in intelligent

[1]Paper read before the Seventeenth Annual Conference of the American Hospital Association, San Francisco, June 22-25, 1915.

care being given the patient. The nurse who is interested enough in her studies to be on the "honor roll," with very few exceptions, carries her knowledge and interest into the sick room and makes nursing a fine art.

But what are we preparing our nurses for? This might well be classified by what the three great organizations of nursing, with which we hold a joint meeting, represent—The American Nurses' Association, which is the alumnæ of our schools; the Educational League of Nursing, which is the institutional worker; and the National Public Health Nursing Organization, including the school nurse, infant welfare nurse, tuberculosis nurse, social service nurse, etc. Now the alumnæ of our schools are three-fourths private-duty nurses. This ratio may be a little high, since the public health nursing field has grown so rapidly, but the training applies to both. How are we preparing them for their field of work? The answer comes by looking at our graduate-special nurses in our hospitals. Are we satisfied with our own product? If we find it so hard to deal with these nurses in the hospital, how are they getting along in the home? How economical are they with supplies? How well do they adapt themselves to the patient, family, servants, etc.? Why do so many patients, who are able to pay for a graduate nurse, not want one? The trouble lies chiefly in the fact that the average graduate does not know how to make a home; she lacks the home spirit; she does not know enough of nursing ethics; she has not studied the law of human kindness, of unselfishness, of bearing and forbearing. How much of this spirit is generated in the training schools? In other words, how much real motherly, "homey" interest do we take in our nurses? Getting the work done thoroughly and the class work attended to is our chief concern. The *spirit* is *first*, and if that is taken care of the rest follows without any trouble. We get the "cart before the horse." I fear that is what is the matter with our private duty nurses. Not long ago a prominent doctor said to me, "Deliver me from a nurse whose God is her salary, who can see dirt outside the sick room and not lift her hand to obliterate it, who would not stoop from her professional work to lift a crying child or relieve a tired mother." The majority of our pupils come from well-regulated Christian homes. They are literally thrown into the cold routine stream of hospital atmosphere. How can you expect them to swim safely ashore amid the temptations without careful watching of all sides of their make-up, the mental, moral and spiritual. Now, I do not mean that we should preach religion, but I do mean that we should generate an influence of justice, of right living and high thinking, of interest, sympathy, unselfishness, of love in its true sense—is there any greater essential in the building up of home life? The school and hospital should be literally saturated with this home spirit.

If we make inquiries of our central directories for nurses we find that comparatively few nurses register for communicable diseases because they do not care for that line of nursing. Why? This training need not be neglected because most schools are available to a hospital of that kind and can obtain that training by affiliation. The same is true of the nursing of nervous diseases. A certain amount of handicraft should be taught in every school to be taken advantage of in a long convalescent period, in the nursing of children, for their amusement, and in diverting the mind of a highly nervous patient. These are not new suggestions, but I would call them to your attention because they are points in which much progress could be made in the care of the patient, which is our first consideration. Statistics show that the average stay of our patients in the hospital is 13½ days. Patients are rushed in and rushed out to make room for others. There is none of the good old-fashioned convalescent period for our nurses to get training in. As a result they do not like the long cases or the chronic cases, for when the short period of operation or acute illness is over with the nurse no longer wants to remain, but gets restless and very unhappy because she has not had the importance of careful nursing (of a different kind, perhaps, and yet fully as important) during the period of convalescence called to her attention, nor has she had any experience with such cases in her training.

One of the most marked signs of progress in nursing, as a whole, is the change of attitude toward nurses of different localities and schools. Ten years ago nurses graduating from a certain training school considered themselves much better, perhaps, than graduates from a neighboring school. State registration working toward a uniform curriculum has greatly aided in stamping out this narrow view, and the local leagues of nursing education have brought the principals of nurses together to discuss the problems common to all and encourage a social aspect, thus aiding in friendliness. Isabel McIsaac did more, perhaps, than any other one person during her term as Interstate Secretary to bring the nurses of the East and West together, making each broader minded. This leads up to a consideration of the institutional nurse.

In a book on Nursing Ethics, written in 1903, Isabel Hampton-Robb said that some one asked that she recommend a head nurse, and after enumerating at length the qualities she must possess to be successful, he concluded with the words, "in short, we require an intelligent saint." Not many days ago I received a letter asking me to recommend some one for surgical nurse in a small hospital, and the doctor after stating the salary and outlining the work said, "I am particular about the type of young woman we get, as well as about her qualifications for work." Are we always as particular as we might be along this line, or do we frequently consider her qualifications for the work only? In my brief experience I have found that some drawbacks to institutional workers are—first, unwillingness to take any more responsibility than is absolutely necessary, especially by a tendency shown to shirk responsibility in the training of nurses; second, lack of respect for authority, loyalty and honesty; third, tendency to too narrow a view or outlook. "Well, I get so tired of telling them over and over," we hear her say. That is what a supervisor is for. Mechanical routine work accomplishes small results. There must be a live interest with thorough demonstration and with alert, watchful supervision on the part of each and every member of a training school faculty, carrying the responsibility of the training of each nurse under her and giving personal attention—studying to bring out the very best that is in her and thus receiving the best service from her.

Where the lack of respect to authority, loyalty and honesty exists the school has a very weak link in its chain. It is possible to inspire these in some, but in others it might well be said that they do not know the meaning of the word. The success of the training school depends upon how much leeway the superintendent has to choose her own faculty, and her ability to pick congenial women who have been well trained in the above qualifications. Women, as you know, are blessed with intuition, and it does not take very long for the influence of one member to lower the tone of the whole school.

With regard to the last point—nursing is too fine a profession for us to allow ourselves to see only our own little corner, and unless we seize every opportunity of association we are neglecting a great opportunity, not only for

our own advancement, but also for helping others. We surely cannot afford ever to grow narrow or selfish or to allow ourselves ever to think of our work as a trade and not the highest profession.

Last, but by no means least, we have the nurses represented in the Public Health Nursing Association. It is needless to relate the great strides of advancement made by this association since its organization three years ago, nor to remind you that ten years ago this line of work was hardly known. The summary of all the qualities of the private duty and the institutional nurse is necessary to the successful public health nurse, no matter what department of that work she is in.

In conclusion, I would urge unselfish devotion to the love of humanity and a realization that just in proportion that we put self first we lose in true progress.

"What does it matter who sang the song, if only the song was sung?
What does it matter who did the deed, be he old in years or young?
What does it matter who ran the race, so long as the race was run?
And why should the winner be proud of himself because it was he who won?

"The one who ran and did not win, did he not do his best?
If he ran to the measure of his strength, what matters all the rest?
If the song was sweet and helped a soul, what matter the singer's name?
The worth is in the song itself and not in the world's acclaim.

"O hearts bowed down with sense of loss because ye did not win,
If ye ran your best (I say *your best*), you, too, have 'entered in.'
The Song, the Race, the Deed are one, if each be done for *Love*,
Love of the Work and not love of self, and the score is kept Above."

Effect of Legislation Upon Schools of Nursing in California[1]

BY ANNA JAMME, R. N.

The California legislature of 1913 enacted two laws governing training schools for nurses in this state: the Nurses' Registration Act and the extension of the Eight-Hour Law for Women to include student nurses. The former was initiated by the California State Nurses' Association, the latter by the Labor Council of the Federated Trades organization of San Francisco.

The act providing for examination and registration of nurses, administered by the State Board of Health, and the law governing the hours of duty of the student nurse, administered by the Bureau of Labor Statistics, are distinctly independent of each other in the method of administration, but very closely related in their operation.

The administrative machinery of the Nurses' Registration Act is a department under the State Board of Health, in charge of a director, who is a registered nurse. This is in accordance with the organization of the State Board of Health, which consists of seven bureaus, each in charge of a director. The law provides that the director shall perform all duties required by the act, including inspection of training schools. The requirements for examination as specifically outlined are that a nurse shall be a graduate of an accredited training school. The requirements of the school are not mentioned, other than that it shall be attached to, or operated in connection with, a hospital or hospitals giving a general training and a systematic, theoretical and practical course of instruction.

Upon this basis the State Board of Health outlined definite requirements from which the schools could arrange their schedule of instruction. An inspection was made of every training school in the state and most hearty cooperation in the work was found to exist. Many small schools are scattered throughout California, in the rural districts, where a hospital is essential, and in these schools, frequently, very excellent instruction is carried out. In several affiliation with larger hospitals has been arranged for the purpose of giving the student a broader experience in bedside instruction.

It is interesting to note that soon after the passage of these laws fifteen hospitals closed their training schools of their own volition. No steps had been taken by the State Board of Health, which preferred to allow every opportunity for the schools to raise their standard before taking action.

The general effect upon the schools may be briefly stated as follows: in schools maintaining standard courses of instruction, little or no change; in schools below standard, the curriculum was enlarged, instruction systematized and brought up to official requirements. Text-books have been adopted where it was found that none were used, and in cases where no class equipment was supplied, not even a blackboard, an effort is now made to furnish the necessary facilities for class demonstration. In about twenty-five percent of the schools special instructors have been added, and in fifty percent a course in dietetics established. In many special diet kitchens have been provided and equipped for the purpose of class instruction.

One result of the law has been an accurate and systematic method of keeping the records of the student's theoretical and practical instruction. The Bureau of Registration supplies the school with printed forms, to be filled out by the superintendent of nurses on the completion of the course of each student, and this record is forwarded to the bureau and kept on file. It embraces the number of lectures and classes attended in each year, the rating on examination of each subject, the amount of practical experience in each department of the hospital and the record of efficiency. This has stimulated the schools to keep records in a methodical manner and it enables the bureau to obtain exact data of each graduate and also to be constantly in touch with the class of instruction given in every school.

It may be said, therefore, that the effect of the law upon the individual student is a matter of personal concern. From the day she enters school she has constantly before her the fact that she is preparing for an examination by the state, and that during every day of instruction, whether in class, at the bedside, in the operating room, or in any branch of service, her general standing is a matter of record. It is hoped that in the near future the student's record in training will be given a definite credit value in her state examination.

The relation of the Eight-Hour Law to the Registration Act has been noteworthy. By the systematic arrangement of eight hours of duty each day a certain portion has been set aside for study. The opportunity thus given for preparation of class material has produced a marked change in the character and results of class instruction. Medical lecturers, who have been questioned generally on this point, unanimously agree that the students show far more interest and are able to grasp the subject-matter with greater facility in the absence of the physical and mental fatigue which characterized the classes before the passage of the law. Under the system of longer hours of duty it would have been impossible and even ludicrous to insist upon the minimum requirements of lectures and classes as now laid down by the State Board of Health.

Notwithstanding its present permissive form, the Registration Act in the very brief period of its existence has demonstrated the value of state control of training schools. The impetus given by the large number of nurses (4,872) registered during the first year is, in itself, a guarantee for the future and of what may be ac-

[1]Read before the Annual Conference of the American Hospital Association, June 22-25, 1915.

complished by students who desire the recognition and special certificate of the state.

It has been gratifying to observe the number of recent graduates who have availed themselves of the two examinations so far held by the State Board of Health. At the first examination in Sacramento, December 5, 1914, five months following the close of the waiver, forty-seven applicants presented themselves for examination, and of this number eleven came from the southern part of the state, which entails an expense for each of at least forty dollars. In the examination held in Los Angeles on May 1, 1915, eighty-six were present, twenty-five having come from the northern part of the state at a like expense. This demonstrates the value the young graduate places upon registration. From data on file in the bureau one hundred and twenty-eight students have been graduated since December 1, 1914.

Viewing the inauguration of this work from the headquarters of the bureau at the capital convinces me that administration of a Nurses' Registration Act by the State Board of Health has been eminently satisfactory. The close relation of the modern nurse to preventive medicine as well as to medical science presents a natural affiliation. Control and direction by an independent authority having a close and sympathetic interest has avoided friction and prevented strife. The policy of the State Board of Health has been one of generous and helpful assistance, criticism and condemnation being avoided. By an intelligent, friendly, and, at the same time impartial attitude, the good-will and support of those concerned has been secured.

The readjustment of educational ideals, notable in vocational training, presents an opportunity for training schools in this state that is unprecedented in the history of nursing. Everywhere the trained and specialized woman is in demand. The scope and activities of the trained nurse are no longer limited to the hospital and the home, her education and training are extending to far wider fields. The time has arrived when the training schools of the state should be in line with other vocational schools and the training of a nurse placed on a parity with the training of a teacher.

The effect of legislation providing for the extension of the Eight-Hour Law for Women to include student nurses has been momentous. It was immediately necessary to increase the number of student nurses in each hospital at least one-third and to arrange a working schedule for the hours of duty, to cover seven hours each day for six days, and six hours for the seventh day, or to arrange that one day in seven be free. It was also necessary that a similar schedule be arranged for the nights of each week. This was found difficult in the majority of hospitals, especially in the operating and maternity departments, where the work could not be regulated according to any definite and circumscribed time. Even in the best regulated and well-ordered hospitals a certain amount of confusion results owing to the frequent change of nurses.

One physician has stated that a patient requiring throat applications received the attention of seventeen different nurses in twenty-four hours for this particular service. Another instance is that of a school teacher in a hospital ten days, because of an attack of pneumonia, who, on leaving, desired to show her appreciation of the services rendered by the nurses. She requested the superintendent to furnish a list of those who had been in immediate attendance during her illness, as she wished to give a little party for them. The list showed that thirty-six nurses were eligible for the party.

All special nursing by student nurses has been discontinued and placed in the hands of graduates. An exception to this is found in the hospitals controlled by the Seventh Day Adventists, where three students are detailed for continuous twenty-four nursing and the patient pays the same amount as for one graduate nurse, namely, twenty-five dollars per week. Nursing in contagious diseases has been interfered with to some extent. Where a contagious department is connected with the hospital it has not been found practical to detail three students on a case, thereby weakening the general nursing staff.

Interference with continuity of work has been keenly felt by the smaller hospitals in the rural districts, where this is largely of the emergency type and where pressure may exist for short and intermittent periods. The compulsion of leaving duty, often at a moment critical to the patient and of great value, instructively, to the nurse, is of very serious import. Upon the student nurse is placed the necessity of very close observation of her time of daily service and of measuring that service more by the clock than by the exigencies of duty and the quality of her work. One institution has installed a time clock and makes it compulsory for all nurses and female employees to punch it on time. It has been repeatedly stated that students have informed the superintendents that their time was up when asked to perform some immediate service for a patient. The superintendent was helpless in insisting that this should be done, owing to the fact of an alien authority in her school controlling this part of her responsibility and prerogative. In many instances the spirit of the work has suffered greatly and the student has become mechanical, especially where the law has been kept in unpleasant prominence.

The utilization of the leisure time has called for serious consideration. In schools where none, or at best poor, provision, is made for the social and intellectual life of the student, this time is apt to be spent on the streets, in cafes, "shows," or elsewhere. On the other hand, where schools provide comfortable and attractive living rooms, study rooms, libraries, tennis courts, and arrange for a certain amount of social entertainment, the student finds her recreation in the nurses' home and surroundings and does not wander abroad unduly for necessary diversion.

No special data have been obtained concerning the effect on the health of students by the provisions of the law. The general health of the schools is affected by causes other than length of hours. Housing conditions, food, service, methods of discipline and the school atmosphere are controlling factors. While excessive hours of duty, often under great strain, is a most vital contributory cause, it should not be considered to the exclusion of other factors in estimating the health standard of the student nurse.

It is significant that all schools are reporting an increase in the number of applicants and more generally from women of good education and general preparedness.

The effect of the law upon hospitals is in turn having a distinct influence upon the school. The increase of students and the decrease of revenue from the special work of the student nurse has seriously affected the finances of the hospitals. In a paper on this subject read before the American Nurses' Association in April, 1914, Miss Lila Pickhardt, superintendent of nurses of the Pasadena Hospital, says: "Just how great this revenue was may be estimated when we have reason to believe that in some institutions forty percent of the nurses were on special cases. Frequently probationers were assigned to special duty and some have estimated that two-thirds of the time while enrolled as student nurses was given to special duty."

Upon the superintendent of the training school has fallen the burden of adjusting conditions to meet the requirements of the law. It is remarkable to see with what spontaneity each superintendent arose to this demand and worked out the problem of fitting herself to meet emergencies under the limitation of an eight-hour service in one day or night and forty-eight hours in one week.

The penalty clause has been in abeyance since the passage of the law, owing to the question of unconstitutionality brought up in the courts of California by means of a test case. The case was ultimately taken to the Supreme Court of the United States and a decision was rendered on February 23, 1915, of which the following is a summary: "The same restriction as to the hours of employment of student nurses in hospitals is not an unconstitutional violation of the freedom of contract, as these persons, upon whom rests the burden of immediate attendance upon and nursing of the patients in hospitals, are also pupils engaged in a course of study, and the propriety of legislative protection of women undergoing such a discipline is not open to question."

During the recent session of the legislature an amendment was initiated by a group of hospitals, with the object of providing for three months' special nursing in the third year of the course. While this was introduced as an amendment to the Nurses' Registration Act, it left the power of enforcement to the Bureau of Labor Statistics. It was defeated on the ground of incompatibility with the Registration Act and that it was an endeavor to utilize the student nurse as a source of revenue to the hospital during this period.

It has long been apparent to all intimately concerned in the training of nurses that the old method, transmitted by custom, of long hours of duty to test the endurance of a nurse, will not now suffice. The period of the survival of the fittest has passed. Many a fine woman has been lost to the school, to the profession and to the state because she could not measure up to the test of physical endurance. Furthermore, we know full well that many would have been attracted to the training school had reasonable working hours prevailed.

Science has revolutionized medicine and philanthropy as well as industry and warfare and has given us new standards and new viewpoints. These standards are influencing and forcing readjustment in all branches and they have extended to the education of the nurse. The present is a period of acute transition in training schools and in this transition there is a conflict of opinion, and in many cases an overtaxing of the power of adjustment. This is inevitable because of the complex character of the relation of the training school to the function of the hospital. Methods for the conservation of the health of the student nurse have been employed on a basis of the methods used for workers in industry. This presents the difficult problem of the adaptation of the inflexible rules of industry to the varying conditions of work which prevail in hospitals.

It is not impossible that the ultimate solution of this problem will be found in evolving a flexible scheme which shall meet the specific needs of the training school and of the hospital. This scheme should insure, not only the safeguarding of the nurse from unduly long hours of duty and from the dangers of exploitation, but should enable her, under favorable conditions for her intellectual and technical growth, to secure the training which modern social conditions demand.

In closing this brief recital of California's part in fostering and uplifting our profession, I cannot escape the consciousness that at no time since the trained nurse first became a factor in our social economy could I have spoken of her calling with more dramatic coloring.

During the past eight months in Europe hundreds of nurses of every nationality have been performing unprecedented tasks and helping, amidst a hitherto unknown carnage, to achieve results that medicine and surgery had so far failed to accomplish. Even in their ranks there has been a high mortality. The greater deadliness of modern warfare has meant a larger measure of exposure, while the range of modern artillery has greatly extended the danger zone. The testimony of all nations is, that they have done their full duty "even unto the end."

As I write there comes before me a message of our President, fraught with momentous possibilities for American nurses. May I not quote the words of a great American: "They here gave the last full measure of devotion"? May we not "here highly resolve that these dead shall not have died in vain"? And for my sisters of California I say we are ready whenever and wherever our country calls on us for service.

NEW HENRY FORD HOSPITAL OPENS

Unit of 100 Beds Now Open—Eventual Capacity to Be 2,000—The Hospital Changes Name

The first unit of the large general hospital being erected at Detroit, Mich., by Henry Ford, the automobile manufacturer, has been completed and, according to plans recently announced, will be receiving patients by the time the August number of THE MODERN HOSPITAL is delivered to readers.

The construction of this hospital was originally started by an organization of citizens, which undertook to build it from private subscriptions, but was not able to secure sufficient funds to carry the work to completion. Mr. Ford took over the whole project, returning to contributors $400,000 which had already been paid in, and agreeing to complete the hospital at a cost of over a million dollars.

The unit just opened has a capacity of 100 beds. Dr. J. N. E. Brown, formerly for six years at the head of the Toronto General Hospital, and for three years secretary of the American Hospital Association, is in charge as superintendent. Dr. Angus McLean heads the surgical staff, and Dr. Frank J. Slayden the medical staff. Dr. James E. Mead, chief physician at the Ford Motor Company factory, will act as Mr. Ford's personal representative on the advisory board of the institution, which is to be known as the Henry Ford Hospital.

It is expected that the entire group of buildings, with accommodations for 2,000 patients, will be completed within the next year.

When asked recently whether the new hospital would engage in research work, Mr. Ford replied that the plan would be rather to try out the results of research work already done. "It is my one desire," said Mr. Ford, "to make this hospital a producer—one that will produce cured men, women and children in the shortest time necessary."

It is known to be Mr. Ford's intention to run his hospital for the benefit of the middle class of people. Prices will be moderate, yet every patient will have a private room.

The Ford physicians are at present observing the work of some of the hospitals in the East in treating patients addicted to drug habits, and it is said to be probable that a unit for drug victims will be built as a part of the hospital.

PREVENTION OF TUBERCULOSIS

Conducted under the auspices of
THE NATIONAL ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS

Education of Library Readers: A New Method of Attack

One of the most original and interesting educational ideas that anti-tuberculosis workers have devised in recent years has just been perfected by the Anti-Tuberculosis League of Kenton County, whose headquarters are in Covington, Ky. The idea is the use of a series of eight attractive bookmarks to be placed in the hands of the librarians of public libraries, one bookmark to be inserted in every book that is given out for general circulation.

CLEAN BOOKS-
CLEAN MIND
CLEAN AIR-
CLEAN LUNGS
DECLARATION OF WAR ON TUBERCULOSIS
A NEW CHAPTER
In the history of mankind is the war on tuberculosis A war to save life - not to destroy it
WHEN YOU READ
open the window and breathe the pure air
HEALTH FIRST
READ
this startling fact. From One death in ten to One death in Seven is caused by Tuberculosis
THINK
The Anti-Tuberculosis League of Kenton County

Figs. 1 and 2. Bookmarks issued by the Anti-Tuberculosis League of Kenton County, Ky.

Mr. William S. Groom, of Covington, the energetic volunteer executive secretary of the Kenton County League, is the originator of the idea. In talking over the distribution of books through the public libraries he learned that 80,000 volumes were circulated every year among the 60,000 inhabitants of that community, and he thought that this was a good opportunity to reach a group of people with a most necessary educational message. His problem was to devise some method which would appeal both to the librarians and to the readers of the books, since not every person who goes to the library is looking for education in tuberculosis. As a result of considerable thought on his part, he devised a series of bookmarks, the text of which has been very cleverly selected so that it will tend to stimulate not only the anti-tuberculosis movement, but the use of books in the library. Once he had secured the wording, some of which was taken from standard literature on tuberculosis, and some of which was entirely original, it was necessary to illustrate it in a striking manner within the brief compass of space allowed on such a device. In this he was ably assisted by Mr. Ralph H. Jones, of Cincinnati, to whom credit should be given for the cartoon ideas and for the general scheme of illustration carried out in the bookmarks as shown in the accompanying cuts.

Mr. Groom has made arrangements to have one of these cards inserted in every book that is given out from the Covington Library during the next year. Since there are eight in the series the tendency of most of the readers of the library, particularly the children, will be to endeavor to collect all of the eight, and the local league will do all it can to further the normal collecting instincts of the children.

The National Association for the Study and Prevention of Tuberculosis was so impressed with Mr. Groom's idea that, in cooperation with him, it has decided to make arrangements for the issuance of these bookmarks on a large scale. The Kenton County League has furnished to the National Association the original drawings and plates, and estimates have been secured from printers on large quantities. While no definite figures can be given until the first set of orders comes in, it is estimated that these bookmarks can be furnished for approximately seventy to eighty cents per thousand, or from $5.60 to $6.40 per set of eight in thousand lots.

The National Association will receive orders for these bookmarks in any quantity and will arrange to have them delivered at the earliest possible date. A sample set of the bookmarks will also be furnished on request.

The bookmarks are in two colors, red and black, and they present a much more attractive appearance than is shown in the accompanying illustrations. The National Association plans to print a line at the top of the card bearing some such wording as the following: "This card is one of a series of eight; collect the other seven." Arrangements are also being made for imprinting the name of the local association at the bottom of the cards, as indicated on the accompanying cuts. The cards themselves will be approximately 1⅞ inches wide by 5¼ inches long. They will be of light cardboard.

THE GREATEST VOLUME
of deaths is caused by tuberculosis Guard your health Keep your name from this volume
TRASHY BOOKS
poison the mind, patent medicines poison the body GOOD BOOKS, FRESH AIR and PURE FOOD assure Wisdom and Health
TURN OVER A NEW LEAF
-avoid the germs that thrive in darkness and dirt live in the fresh air and sunshine
HEALTH HIGH SCHOOL
MARK
these facts
Fresh Air, Sunlight Wholesome Food Honest Doctors and Pluck
are enemies of tuberculosis
The Anti-Tuberculosis League of Kenton County

As designed, the cards are suitable for distribution not only in the libraries, but also in the public schools for the use of the children as bookmarks in their text books, and in almost every place where books are used. They can

also be used without referring to books. It is suggested, however, that those who order these bookmarks order them in series. The value of the cards is greatly enhanced in this way.

The National Association makes no profit from the sale of these cards other than an amount sufficient to reimburse itself for the price of the original plates and drawings, and such incidental expenses connected with the preparation of the cards as may be necessary. An effort will be made to get the lowest possible price from the printer for the benefit of those who wish them.

It is suggested that instructions with regard to imprinting accompany any orders that are sent in. Additional charge will necessarily be made for imprinting; the amount of this cannot be determined at this time. The address of the National Association is 105 East 22nd street, New York City.

Admitting Patients to a State Tuberculosis Sanatorium

A state sanatorium for the treatment of tuberculosis should presumably serve two purposes, first, the treatment of the early, favorable case, and second, the education of these patients and the community at large as to the nature, curability and prevention of the disease. In Rhode Island Dr. Harry Lee Barnes, the superintendent of the state sanatorium at Wallum Lake, is making the institution perform a third function in educating the physician in the diagnosis of tuberculosis. In describing his work he says in the May number of the *Journal of Outdoor Life:*

"This plan [of a single examiner] has been modified in many states by having a sufficient number of examiners to cover thoroughly the state, thus avoiding the expense and inconvenience of travel on the part of patients. If reasonable care is exercised in appointing good men, this scheme is a workable one.

"This plan of having examining physicians, be they two or two hundred, is, however, open to the following disadvantages:

"First: Family physicians dislike to turn over to other physicians cases in which diagnosis and indications for treatment are clear, and this operates in many instances to delay the admission of patients.

"Second: The plan of relying on examiners produces a few experts in the diagnosis and prognosis of phthisis at the expense of the general practitioners who send their cases to examiners and rarely learn why one case is considered suitable and another unsuitable for admission. The cases of active tuberculosis in any state cannot be found originally by sanatorium examining physicians who merely receive cases from general practitioners and pass them on, but the cases must be originally detected by general practitioners. The education of a few experts therefore does little, while the education of the great body of the profession does much to detect early cases. In the states of Massachusetts, Maryland and Rhode Island (and possibly others) these disadvantages have led to the abolition of examining physicians and the admission of sanatorium patients through application blanks, which can be filled out by any licensed physician of the state. While it would be hopeless to expect all licensed physicians to become expert examiners when they handle on an average only a half-dozen cases of tuberculosis a year, yet when they begin to share the responsibility of admission, they begin to learn. They must fill out blanks, and in order to do this they must take histories, note symptoms, make examinations, and, in short, study cases more carefully instead of shifting the problems to state examiners. If they omit to give information on the blank as to the pulse or temperature, for instance, they are required to get this information, and they receive a letter from the sanatorium explaining its importance.

"In doubtful cases additional information may be required. If the case is rejected, the sanatorium explains why; and if, despite precautions, an unsuitable case is admitted, the physician is informed of it and how the mistake occurred. All this work educates physicians and stimulates early diagnosis and proper treatment of patients.

"What, then, shall be our method of furnishing physicians in general practice with information regarding their duties in handling tuberculosis?

"Of course the ideal would be a special book on tuberculosis in the office of every physician with the time and disposition on his part to consult it, but this is impracticable. Reading papers on tuberculosis before local medical societies is a favorable way. Such papers do some good, but the impression of a paper quickly fades from the minds of busy men. If the article is published in medical journals, or reprinted and sent to practitioners, more good results, but the medical journals are filed away and the reprints are soon mislaid or lost. These difficulties have led me to prepare a special article on tuberculosis to be printed on the back of each admission blank, which formerly contained only the classification of the National Association for the Study and Prevention of Tuberculosis and a few directions as to the cases desired and the method of making applications. As physicians keep these blanks on hand and must use them in order to admit cases, the information cannot be so readily forgotten, filed away or lost as are addresses, medical journals or reprints.

"At first I tried to make the article brief, say three to six hundred words; but I finally gave this idea up. What the general practitioner needs, when he suspects that he has a case of tuberculosis, is not something brief, but something which is complete enough to help him in puzzling cases, which will fully set forth the physician's duty to his tuberculous patient; something which he can always have on hand for reference. The result has been a summary more complete than will be found in ordinary textbooks, and yet one that can be covered in a half hour. If the physician mislays a blank, he can get another in two days and without expense. The division of the subject-matter into 24 headings allows the busy practitioner to look up any problem found under these headings in two or three minutes. The cost of printing these blanks was about one cent each. The blank comprises six pages, including the chart and statistical material on the first page."

The following list of headings will give some idea of the topics discussed: "A Task for the Medical Profession"; "The Importance of Early Diagnosis"; "The Frequency of Mistakes in Diagnosis"; "Physicians' Mistakes from the Patients' Standpoint"; "Beware of 'Colds'"; "Incipient Cases Appear Well"; "A History All Important"; "Diagnostic Value of Symptoms"; "Sputum Examinations"; "Physical Examination"; "Tuberculin Tests"; "Chronic Bronchitis Per Se Is Rare"; "Don't Postpone Diagnosis Too Long"; "Always Tell the Patient"; "Instruct Patients in Sanitation"; "Finding Other Early Cases"; "Home Treatment Is Playing With Fire"; "All Favorable Cases Should Be Sent to Sanatorium"; "Length of Stay"; "Cheer the Patient"; "Why Going to the Country is Not 'Just as Good'"; "The State Sanatorium Not for Far Advanced Cases"; "What Symptoms Indicate Far Advanced Disease?"; "What Should be Done with Far Advanced Cases?"; "Children"; "Vacancies"; "Typical Mistakes."

PHILANTHROPY AND THE PUBLIC HEALTH

THE NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR.
BAILEY B. BURRITT, General Director.
WILLIAM H. MATTHEWS, Director,
Department of Family Welfare.
DONALD B. ARMSTRONG, M. D., Director,
Department of Social Welfare

SEEING IS BELIEVING

How the Bureau of Food Supply Visualizes Food Values and Food Hygiene

BY HOLLAND HUDSON

The accompanying illustrations show the manner in which the Bureau of Food Supply of the New York Association for Improving the Condition of the Poor has organized an educational exhibit on behalf of clean food, pure food, and properly selected food. The exhibit was planned and directed by the bureau's special investigator, Miss Laura A. Cauble, from material supplied by the bureau and by the Department of Health of New York City. The theory of the exhibit is that the abstract terms of calorics, dietetics and even of the sanitary code mean little to the food dealer and consumer without graphic and succinct visual demonstration. Seeing is believing, because most people are "eye-minded."

The materials of the exhibit consist not only of photographs and diagrams, but of an actual qualitative and quantitative exhibit of food samples. For example, the whole truth about bread is graphically presented. Enlarged photographs show how bread is produced in both sanitary and insanitary bakeries, and the customer is urged to demand sanitary baking methods. A showcase demonstrates the degree of cleanliness and protection a purchaser has every right to demand from the merchant who sells the bread. The proper importance and proportion of bread in human diet is graphically illustrated by samples of various breads in 100-calorie portions, compared with 100-calorie portions of other foods. This 100-calorie portion exhibit also compares the costs of various food materials. Large charts illustrate the economical buying of meat. Altogether the exhibit teaches the housewife to make the family budget show the most nutrition for the least outlay.

Every fundamental material of diet is demonstrated in this threefold fashion. The subject of food supply is illustrated in its sanitary, dietary and economic aspects. The danger of bacterial infection of meats and other food materials, and consequent waste, is emphasized by photographs and by jars containing infected materials. Special emphasis is also placed on the proper handling of all foods in stores and restaurants. In this particular as in others, the exhibit is directed as much to the dealer as to the consumer. The dealer is shown what the sanitary code means and how to obey it. In addition to the photographic illustrations, inexpensive refrigerator showcases, approved by the department of health, are shown. The customer is taught to demand unspoiled and unfingered foods.

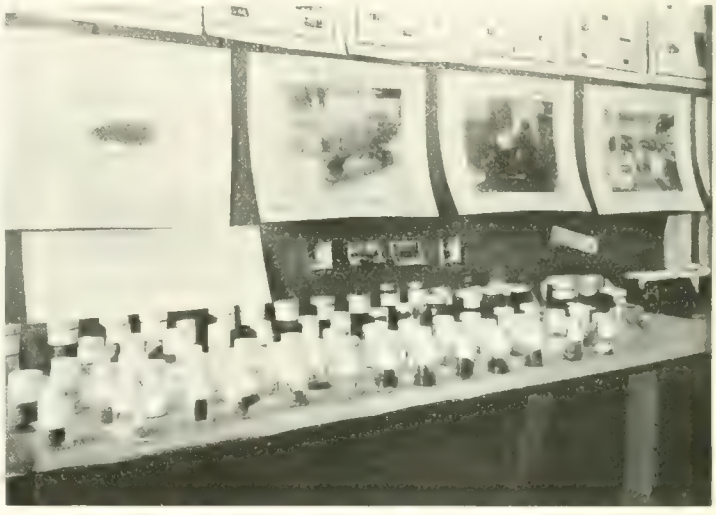


Fig. 2. How to buy the most nutrition at the smallest outlay. All jars contain the same amount.

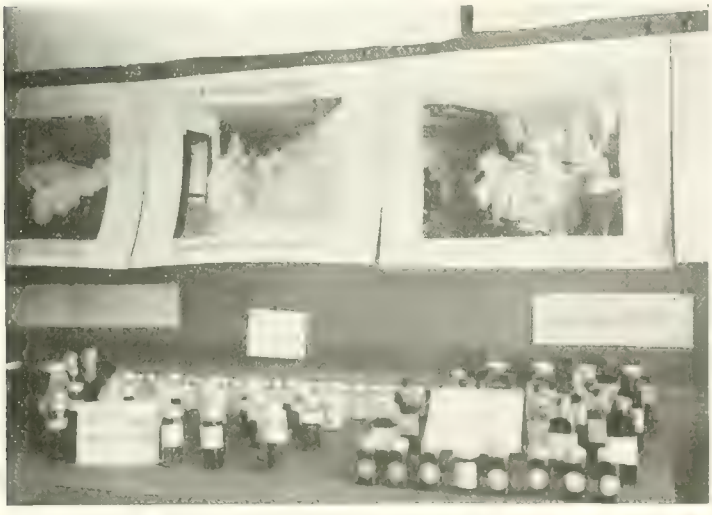


Fig. 1. Flavor and color as shown in the Department of Health exhibit.

On another table the less essential but very popular flavoring materials are demonstrated. The customer is encouraged by an exhibit of common food adulterants and coal-tar dyes to consider for herself whether she wishes her foods pure or adulterated.

The entire exhibit is so organized as to bring home to the visitor these facts: (1) that one of the most important functions of the health department is to safeguard the public health as regards food supply; (2) that public health agencies are the friends, instead of the enemies, of food dealers in that they seek to eliminate unprofitable wastes; and (3) that it is up to the consumer to join public health agencies in demanding sanitary methods of food handling and also to select those foods which best sustain human life.

The exhibit is built to travel. It was originally shown at the College of the City of New York, where it interested a large portion of the student

body whose courses called for no special study of food supply or food values. In the first ten days in its second home in a congested and unprosperous section of New York's West Side, it translated the caloric standard of food values from a laboratory formula to a household convenience for about 2,000 people and gave the department of health aid in the enforcement of the Sanitary Code. Its itinerary already includes by request Greenwich, Conn., under the auspices of the Connecticut Research Association; the Washington Street Market district of New York and Brooklyn. Organized originally as a test of food-exhibit methods and possibilities, this exhibit has already far surpassed the most sanguine expectations, especially in its appeal to intelligent public interest and in its fruitfulness of result.

Fig. 3. Cheap and sanitary showcases at the exhibit.

Greater Sea Breeze at Last

After almost constant litigation and legislation since 1907, the new seaside hospital of New York City, erected by the New York Association for Improving the Condition of the Poor, has at last been turned over to the city with accommodations for 138 children afflicted with non-pulmonary tuberculosis. It was for this hospital that "Smiling Joe" was used to such advantage during a financial campaign that extended throughout the country. Over $250,000 was realized at that time and the money has been held in trust until now. Practically all the money has been expended in the establishment of the institution. In turning over the hospital to the city, Cornelius N. Bliss, Jr., president of the association, says:

"The New York Association for Improving the Condition of the Poor," having completed the construction and equipment of a hospital for the sea-air treatment of children suffering from non-pulmonary tuberculosis, in accordance with its offer made in November, 1906, renewed in April, 1912, and accepted by the city, in resolution adopted by the Board of Estimate on July 15, 1912, is now ready to turn the complete structure over to the city authorities.

"The site upon which this hospital was constructed was withdrawn from the jurisdiction of the Park Board and conferred upon the trustees of Bellevue and Allied Hospitals, and we are accordingly notifying the trustees of Bellevue and Allied Hospitals that the structure is ready for immediate occupancy."

PREVENTION OF BLINDNESS

MATERNITY

Conducted by CAROLYN CONANT VAN BLARCOM, R. N.,
Secretary National Committee for the Prevention of Blindness;
Chairman Committee on Infant Welfare, National
Organization for Public Health Nursing.

What Nurses Can Do to Prevent Blindness

BY DR. ELLICE M. ALGER,

Professor of Ophthalmology, New York Post-graduate School; Member Committee on Conservation of Vision, American Medical Association; Director National Committee for the Prevention of Blindness.

The last fifty years have seen such an enormous increase in medical knowledge that even physicians are not able to keep abreast of the whole field, and we have seen the consequent development of specialties and sub-specialties. But we have made comparatively little progress toward realizing Pasteur's dream of abolishing all contagious diseases from the earth.

This failure of preventive medicine has not been the fault of the physician, for he has seen the possibilities of modern science. But for a quarter of a century he made the same mistake that all experts are likely to make, the mistake that reformers and sociologists and philanthropists are making today: of thinking that it is possible to accomplish lasting social results by the simple process of making laws. To this feeling we owe a host of sanitary laws which have not only been practically unenforced, but which have actually aroused resentment and opposition and distrust. We can see this same feeling every day in the public attitude toward organized charity and the great philanthropies, which are making the same fatal error.

Public education is the only sure foundation for public health. The patent-medicine man, sordid and mercenary as were his motives, was the first to appreciate popular interest, and he really started the public health movement by the frank talks in his advertising. In the days when a reputable physician would have been ostracised professionally for addressing a mothers' meeting, the patent medicine man was teaching his dupes that they had "organs" and "weaknesses," and while it has made them, perhaps, morbidly sensitive, it at last created a wide demand for honest and disinterested advice.

This has been true of diseases of the eye just as much as of tuberculosis and cancer.

Physicians have known for a generation or two how at least half of the blindness in the world might be avoided. But the hygiene and diseases of the eye constitute perhaps the most sharply segregated specialty in medicine, and most of the popular enlightenment has come down clouded by the ignorance of honest but untrained tradesmen, or colored by the frauds of the quack.

Some years ago the American Medical Association, to meet what it felt was a public need, organized a Committee on Conservation of Vision which has conducted illustrated lectures in practically every state in the Union,

and, through the organization's press bureau, reached millions of readers through their local newspapers. But there are manifest disadvantages under which any purely professional body labors, the danger of being too technical, too impatient, the lack of funds and full-time workers, and of late a new National Committee on Prevention of Blindness has been organized. It includes physicians, of course, but it aims to include also all who are interested directly or indirectly in the conservation of vision, men and women, physicians and laymen, employers and employees. Among those who, by training and purpose in life, are prepared to understand and aid in this great popular campaign, none stands higher than the trained nurse, while perhaps the most important part of the whole work deals with the period of infancy and children.

We are coming to recognize more and more the right of the child to be well born. This is a truism as applied to epilepsy and idiocy, and yet few are aware perhaps what an important factor heredity is in diseases of the eye. In such conditions as congenital cataract, retinitis pigmentosa, night blindness, and albinism, the element of heredity is so well marked that there is a tremendous probability that the children of an affected parent will be blind or practically blind. The element of consanguinity of parents is also a very important one, because it offers a

Fig. 1. This little girl was born with normal eyes. The midwife did not use prophylactic drops, nor was a doctor called when the child's eyes became sore. She pays the price of lifelong blindness for this neglect.

double chance of the child's inheriting any family peculiarity. One does not realize how frequent these conditions are except in an institution for the blind, where are collected, as in an eddy, this hereditary flotsam, children lacking one or both eyes, or some part of an eye; children with microphthalmus, or macrophthalmus, and all sorts of hideous congenital defects. To a less extent we are now beginning to trace the element of heredity in such conditions as color blindness, glaucoma, ordinary senile cataract, and progressive myopia. Extreme deformities in the shape of hyperopia and astigmatism appear in many instances to be congenital. There seems to be no question that a man or woman with such diseases as retinitis pigmentosa or congenital cataract should not marry, or at least not have children, because the probability of transmission is so strong and the disability is so great.

Fig. 2. These babies had sore eyes, but their sight was saved through prompt and vigorous treatment.

Then there are certain diseases which, through heredity, are very prone to involve and frequently ruin the eye, notably, syphilis. Indeed, before the day of complement fixation, the interstitial inflammation of the cornea was one of the triad of diagnostic symptoms of hereditary syphilis.

Many think the trained nurse is destined to take a far more prominent place in the obstetrics of the future—whether as the assistant or the competitor of the physician is in the lap of the gods. In any case, she must know about ophthalmia neonatorum. Credé showed that a drop of 2 percent nitrate of silver instilled into the eyes of the new-born baby would practically abolish ophthalmia neonatorum. It practically never occurs today in the large hospitals, and yet from the neglect of the family physician or the midwife a steady stream of blind children, in numbers practically undiminished, trickles into our institutions for the blind. Ten percent of the nation's blind might have been saved by this perfectly simple procedure. The midwife today superintends the birth of rather more than half the children born in our large cities, and we need not be surprised that under these conditions ophthalmia persists. But the reports of our hospitals and asylums have revealed the astonishing fact that at least half of the cases of ophthalmia result from the neglect of the family physician.

The reason for this neglect seems to me perfectly evident. Both the physician and the layman of today firmly believe ophthalmia neonatorum to be essentially a gonorrheal infection. All the text-books teach it. Every case of conjunctival discharge in the newly born is at once accepted by physician and mother and friends as proof of a previous infection of the mother by an unfaithful husband. All the popular pseudo-scientific teaching of the day lays special stress on this.

Now this is only half true. The gonococcus is only one of a number of germs which may cause ophthalmia. In America fully half the cases are caused by other germs. This venereal theory has been the great obstacle to universal prophylaxis. The physician, skeptic though he may be of a human virtue, cannot suspect every woman of harboring a latent gonorrhea, and taught as he has been,

there seems to him in many cases no logical need of prophylaxis.

Furthermore, physician and patient and friends often feel that prophylaxis against a venereal disease is not only unnecessary, but insulting. But if we convince both physician and mother that ophthalmia is not necessarily a disgrace, but in practically one-half the cases results from the common organisms found in vaginal secretions, the physician will at once see the advisability of prophylaxis in every case, while parents will no longer feel insulted at the suggestion of such a precaution, but will demand it. Furthermore, the community will cease to harbor the unworthy suspicions that now prevail in regard to almost all inflammations and scars in the eyes of children.

Fig. 3. Nurse treating baby's eyes with preventive drops.

The gonococcus theory also leads to serious errors in treatment of the disease. Physicians and nurses are afraid of it. It is denied admission to most hospitals, while the persistent idea that the disease is a desperate one calling for radical treatment so affects our ideas that I firmly believe almost as many eyes are lost or damaged by overtreatment as by neglect.

What we wish to accomplish is universal prophylaxis and, when cases do occur, immediate treatment and definite responsibility on the part of someone for the case. We do not all agree on the means.

Personally, I am very skeptical of our ability to accomplish much of real value by passing laws, but I believe that through the trained nurse and the various child welfare organizations we can make prophylaxis as much of a tradition as the babies' first bath. When that time comes we shall not have to worry about compulsory reporting or institutional treatment.

The trained nurse is destined to become more and more the guardian of childhood. In wealthy families the entire care of young children is often entrusted to her. In a more public capacity the school teacher is already dividing her responsibility with the school nurse, while the social service nurse is rapidly becoming the family adviser and familiar friend of whole neighborhoods.

We want to lay new responsibilities on the nurse. We want her to know the danger to the eyes of infections like trachoma, and how they are spread by unsanitary social appliances like the common towel. We want her to realize the tremendous handicap placed on a whole life by some of the supposedly trivial eye infections that so often follow the diseases of childhood and result in permanent scars and defects of sight. She must know how to distinguish the trivial from the serious, many of them she must treat day after day under the occasional supervision of the physician. We want the nurse to be aware of the fact, too little appreciated even by physicians, that the child who cannot see well or whose efforts to see result only in eye-strain and headache cannot be efficient either in school or in after life. She must learn to recognize these defects and use her influence to have them relieved.

There are several other phases on which I should like to touch if space permitted. Whether in the sick-room, as midwife, as teacher, as social worker, the trained nurse has a tremendous opportunity for social service, for popular education in all that makes for health and efficiency. We want her to help us create a demand for everything that makes for better care of the eyes, for higher standards of services, so that the optical fakir and the spectacle vender may go the way of the midwife. We want her assistance in creating a public opinion which shall so modify the training of physicians that an ophthalmologist may not be obliged to wade through all the other specialties before reaching his own, but be made a master of one specialty rather than a "Jack" of several; so that competent medical care of the eyes may not be practically restricted to the well-to-do and the interesting poor, but may be within the reach of all. We want her to help bring about such a modification of training school methods that there shall be less rolling of bandages and moulding of tampons and more practical training so that every nurse may have a knowledge among other things of the ordinary procedures in ophthalmic nursing. Public school nursing and social service nursing are becoming just as important as surgical nursing and in them a knowledge acquired in the dispensary is much more useful than the technic acquired in the ward or the operating room.

And finally, there are in every community a few blind children. Sometimes they are grossly neglected and sometimes treated like pet animals rather than human beings. Many of these children who are *born* blind have mental defects which have wrongfully been ascribed to their blindness. They must not be allowed to be a drag on the rest nor to make the condition of blindness seem more hopeless than it is. We want the nurse to know how much can be done for the normal blind children, how much better they do when trained with more fortunate children instead of being segregated. We want the nurse to realize and to make clear to her proteges that the blind child gets his greatest happiness and advancement not in having things done for him, but in doing for himself. Blessed was the inspiration that crystallized the treatment of blindness into one crisp phrase, "*Light Through Work.*"

A unit of the British Red Cross has been organized at Chicago, with Dr. John B. Murphy at its head. The unit consists of thirty-two doctors and seventy-five nurses and will be placed in charge of a hospital of 1,040 beds, probably in Belgium. Among the doctors are James Neff, Philip Chancellor, Earl Ball, George Davis, George P. Gill, R. L. Thompson, Clark S. Smith, Sidney Walker, Thomas H. Grosvenor, Edgar Lee, C. F. Fox and Scurry Terrill. The nurse membership of the corps includes Miss Isabel Patton and Miss Grace Baldwin, of Michael Reese Hospital; Mrs. Mildred van Aiken and Miss Irene Cains, of the Children's Memorial Hospital; Miss Nellie Brophy, of Mercy Hospital, all of Chicago, and Mrs. B. Barker, of the Lakeside Hospital, Milwaukee.

SOCIAL HYGIENE
VENEREAL DISEASES

Conducted by WILLIAM F. SNOW, M. D.,
General Secretary, The American Social Hygiene Association,
105 West Fortieth Street, New York City.

Two Studies of Venereal Disease Clinics[1]

The important part that must be played in handling the venereal diseases as a public health problem by added facilities for diagnosis, advice, and treatment is now very generally recognized and is emphasized by the increasing number of agencies for these purposes and by the growing attention that their work is receiving. Questions of efficiency are being studied as a means for improving the quality of the work done and of enabling such agencies to reach larger groups of patients. The report of the testimony taken by the British Royal Commission on the venereal diseases points repeatedly to the increased need for clinical facilities for out-patients. In this country advisory agencies are springing up both under the direction of boards of health and as private enterprises.

The needs and possibilities of venereal disease clinics are well illustrated by recent studies of work done in Boston and New York City. Mr. Michael M. Davis, Jr., Director of the Boston Dispensary, urges the need of evening clinics to meet the necessities of working people who generally are employed during the hours when day clinics are open. Mr. Davis says in regard to the work of the evening clinics of the Boston Dispensary:

"The proposal to establish evening clinics has incurred some opposition from the profession, partly because of the feeling that undue competition with private practice would result, and partly because of the failure of those interested in the establishment of evening clinics to recognize the exact character of the problems which these clinics must face, and the proper organization to deal with them. So long as the out-patient clinics are established chiefly to care for the so-called "poor," meaning those who are at or below the line of self-support, or as centers of medical teaching, we have one condition of affairs. We have quite another condition when we propose to establish clinics as public health measures for the purpose of providing diagnosis and treatment for such dangerous contagious diseases as syphilis and gonorrhea, and with the aim that the clinics shall reach a large proportion of the population. It is clearly unfair to the medical profession to establish such clinics, unless the medical service is salaried. Furthermore, we must understand as exactly as possible the economic classes whom these clinics are to reach. If we are to regard the clinics as public health measures rather than as charities (they may of course be both), then we must give up the notion that the people entering them are "objects of charity." We must expect to receive persons who are self-supporting, but who are unable to meet the cost of the best treatment at the usual private fees. We must welcome the opportunity to establish clinics with such fees as these persons can afford to pay and we may properly endeavor to make such clinics entirely, or at least largely, self-supporting.

"The evening genito-urinary clinic for men was opened in the Boston Dispensary on March 23, 1914, and it has been maintained three evenings weekly, Monday, Wednesday, and Friday. The medical service has the same directing staff as the genito-urinary department of the regular morning clinics of the dispensary. The organization of this staff includes two chiefs, each on duty six months of the year, an assistant to each chief, and such additional assistants as the size of the clinic requires. The salaries have been $500 for the six months' evening service (three nights a week) for the chiefs. The first assistant receives a little more than half this amount. The fees charged patients are 50 cents a visit and the prices for medicines are somewhat above the cost of the drugs.

"During the first year of the clinic, closing March 22, 1915, 632 individual patients were received, paying 6,809 visits. This is an average of 10.77 visits per patient. The expense of the clinic, including all charges except rent and supervision by the general officers of the dispensary, was $4,622.89. The income from the clinic from the fees paid by the patients for admission and for medicines was $4,936.34. It should be added that patients unable to pay the 50 cents admission fee, or the fees for medicines, have not been refused.

"In the last week of July, 1914, an evening clinic for syphilis was opened. This has been maintained one night weekly, a salaried physician and a trained nurse being in attendance. For the first nine months of this service, 116 patients were treated, paying 449 visits. The fees charged are 50 cents a visit. Medicines are furnished at somewhat above the cost of the drug. Injections of neosalvarsan have been given for a fee of $3.50, but beginning in May, 1915, the increased market price made it necessary to raise the fee to $4.50. Wassermann tests are $1.00. The income from the evening syphilis clinic was $592.15, the expense $377.55, this including the receipts for neosalvarsan, but not the fees from Wassermann tests, both income and expense for this work being charged to the Boston Dispensary Laboratory."

Among the statistics obtained at the genito-urinary clinic are the following:

Of 369 patients who had not previously been treated at the Boston Dispensary, 326 (88½%) were single, and 43 (11½%) married. Of 197 patients, 89 (45%) came with their first gonorrheal infection, and 108 (55%) had had a previous infection. These proportions are reported to be substantially the same which obtained among the day clinic patients, but the evening patients are of a somewhat better economic condition. Confirmed alcoholics are few and casual workers are practically absent. These differences are what would be expected in view of the fifty-cent fee charged.

Of 200 cases reporting, 32 had received no previous medical treatment, and were mostly those who came to the clinic immediately after the onset of symptoms; 39 had been treated by private physicians; 24 by some other dispensary or hospital; 38 by quacks or "medical institutes"; and 67 had purchased medicine and treated themselves; that is, 105 of the 200 had received no reputable medical attention. A study of the prices paid by patients for previous treatment indicates that the cost to the patient at the clinic, counting everything, exceeds little, if at all, the prices paid for medicines alone when bought at commercial rates, either on a physician's prescription or at the patient's own initiative. In view of the brief period covered by these evening clinics' activities, Mr. Davis does not attempt a statistical estimate of the effectiveness of the treatment given, but cites, however, the figures of Henry D. Sanford, M. D., of the Lakeside Hospital, Cleveland, Ohio, in 1913, showing 12 percent of cures from 100 consecutive cases, and of the Boston Dispensary, 1911-12, showing 11.4 percent of cures in 499 cases.

"With the present fees, methods, and groups of patients reached, there is an enormous field for such clinics, i. e., practically all venereal patients from the whole vast group of self-supporting wage-earners. To reach such patients among clerks, students, and professional and business men of small means, would probably require more indi-

[1]Social Hygiene, June, 1915. Evening Clinics for Venereal Disease. Michael M. Davis, Jr., Ph. D., director of the Boston Dispensary, and A Survey of Venereal Clinics in New York City, and A Statistical Efficiency Test, B. S. Barringer, M. D., and Philip S. Platt, M. A.

vidual privacy than has thus far been found necessary, although the existing routine of the clinics already provides for more individualization than is often found. . . .

"On the other hand, are we not leaving out the lowest paid workers, who cannot, or should not, afford even a 50-cent fee? Is there not need for evening clinics, free, or at the nominal prices usually charged at morning or afternoon clinics? Undoubtedly there is such a need. . . .

"If out-patient clinics are indicated as an important means of enlarging treatment facilities, we must establish clinics at such hours and under such financial conditions as will render them most capable of doing the work that needs to be done. We must regard them as public health measures. It is a prime duty of the leaders in this campaign to see that the leaders of the medical profession, and the interested general public, are informed as to the facts and kept abreast of developments by a persistent process of education. . . ."

In New York City a survey of the 27 clinics in which syphilis is treated and the 26 venereal disease clinics was recently made under the direction of the Society of Sanitary and Moral Prophylaxis and the Association for Improving the Condition of the Poor. The report prepared by B. S. Barringer, M. D., and Mr. Philip S. Platt approves seven of the syphilis and four of the venereal disease clinics, and disapproves 20 and 22, respectively, basing its findings upon the requirements of the Associated Out-clinics of New York City. These requirements are as follows:

I. SYPHILIS

1. The treatment of syphilis, whatever its manifestations, should be conducted in one department, which shall be either a special department of syphilis or the dermatological department.

2. Whenever the nature of the lesion, such as eye, throat, viscera, etc., has directed the patient to a department other than that for syphilitics, the treatment should be conducted jointly by the two departments, but the antisyphilitic treatment be administered in the department of syphilis or the dermatological department.

3. Every department for the treatment of syphilis should be provided with a dark-field microscope.

4. Facilities for making the Wassermann reaction test should be provided, if possible, in every institution where syphilis is treated.

5. Wherever laboratory facilities for making the Wassermann reaction test are not available at the clinic, provision should be made for the prompt conveyance of the specimens to the Department of Health or other places at which the examinations are made.

6. The principle of limitation of the number of patients in each clinic should be adopted, such limitation to be based upon the estimated facilities in men and equipment of each clinic.

7. Intravenous medication may be administered to suitable ambulatory cases of syphilis.

8. In view of the fact that an obligation to render a patient with an infectious disease innocuous at the earliest possible moment rests on the institution to which the patient has applied for treatment, it is the duty of such an institution to provide suitable medication free to those who are unable to pay for it.

9. The Association recommends that a suitable uniform circular of instructions be given to every syphilitic patient at the dispensary.

10. The Association recommends that uniform forms of records be employed in all the clinics treating syphilis.

II. GONORRHEA AND CHANCROID

1. Every department for the treatment of gonorrhea and chancroid should be provided with a microscope.

2. Every department for the treatment of gonorrhea and chancroid should be provided with proper facilities for sterilization.

3. Facilities for endoscopic and cystoscopic work should be provided.

4. Wherever laboratory facilities for making the complement deviation test for gonorrhea are not available at the clinic, provision should be made for the prompt conveyance of the specimens to the Department of Health or other place at which the examinations are made.

5. The principle of limitation of the number of patients in each clinic should be adopted, such limitation to be based upon the estimated facilities in men and equipment of each clinic.

6. In view of the fact that an obligation to render a patient with an infectious disease innocuous at the earliest possible moment rests on the institution to which the patient has applied for treatment, it is the duty of such an institution to provide suitable medication free to those who are unable to pay for it.

7. The Association recommends that a suitable uniform circular of instructions be given at the dispensary, to every patient suffering from gonorrhea.

8. The Association recommends that uniform forms of record be employed in all the clinics treating gonorrhea.

The Association has recently adopted the additional requirement that genito-urinary, skin and syphilis clinics be open at least three days in the week. It has under consideration for action at its next meeting that a uniform method of discharging gonorrheics be adopted, and that this include a complement fixation test.

The conditions found, however, are not as discouraging as would appear from the figures given, inasmuch as many of the disapproved clinics could "with slight effort and with a few changes" become approved.

In spite of the insistence of the Associated Genito-Urinary Clinics, separate departments for syphilis and venereal diseases are maintained in only five clinics. The lack of adequate facilities and adequate instruments is a frequent fault and one for which the clinic authorities, rather than the chiefs of clinics, are responsible. "Many of the rooms in which the clinics are held are decidedly filthy. This, by the way, applies not alone to genito-urinary and syphilis clinics. The effect upon a patient of advice given by the clinic physicians as to personal cleanliness, for example, is considerably negated if given in a room that is dirty. This is again a matter for the clinic authorities and not for the chief of clinics." A further criticism is based upon the fact that some clinics are open but two days a week.

"Supplementary to the above survey of the genito-urinary clinics, and in connection with a study of the treatment of Association for Improving the Condition of the Poor, patients having venereal disease, the Bureau of Public Health and Hygiene of that organization planned to observe and compare the results obtained in several clinics, selected as representative of the best and of the worst types of day and night clinics. Instead of finding the information readily available, it was either found to be unobtainable, or obtainable only upon many days' research. The number of patients, the number of visits per patient, and the results of treatment in the four clinics studied were obtainable to the following extent: in one clinic it was absolutely impossible to determine such facts, as no record was kept beyond the name, address, and diagnosis at first visit; in another an analysis of about 99,000 cards, representing all patients coming to the entire dispensary during a period of three years, offered the only means of determining the facts; in the other two an analysis was necessary of only a year's clinic records, though these records, in one case, were the private possession of the physician in charge. The desirability of information regarding the operation of a clinic should be as manifest as the necessity for bank accounting.

"Detailed analysis of a year's records was possible in only two of the clinics. It was necessary of course to go back about six months from the time of the study so that new patients coming in the last month of the year and continuing treatment into the following year could be taken into consideration. Patients were divided into three main classes—gonorrheal, syphilitic, and others. Gonorrheal patients, acute and chronic, diagnosed by the presence of gonococci, were then classified according to whether they had been 'dismissed as cured,' 'ceased treatment, improved,' or 'ceased treatment, unimproved.' The standards used in these classifications, while not identical, are fairly comparable. In both clinics a patient was declared 'dismissed as cured' only when his record so stated. In clinic 'A' this was done when there was complete absence of discharge after the beer test, the urine was repeatedly clear, and no gonococci could be found. Complement fixation was not a regular procedure. In clinic 'B' no case was discharged as cured until, in addition to the other tests, the blood was found negative. The class 'ceased treatment, improved' consisted in both clinics of those in whom discharge was absent (whether only temporarily or permanently was not known), the urine was only slightly, if at all, cloudy, and gonococci were not found. There are undoubtedly a number in this group who would, in the course of another week or two, be pronounced cured, just as there are doubtless those in whom the disease, being only dormant, would flare up following any indiscretion. The third group is composed of those in whom the symptoms were active. Following are the number and percentages in each group:

GONORRHEA

	Clinic A		Clinic B	
	Number	Percent	Number	Percent
Dismissed as cured. . . .	25	9.7	38	9.4
Ceased treatment, improved.....	50	19.3	57	14.2
Ceased treatment, unimproved.....	184	71.0	308	76.4
	259	100.0	403	100.0

"Less than 10 percent were dismissed as cured. That the situation is not peculiar to these best two clinics may be seen by reference to the tests conducted by Michael M. Davis in 1912 and Dr. Henry L. Sanford in 1913, already cited. Dr. Sanford says, 'Whether twelve cures out of a hundred are a creditable number or not, with the drawbacks of this class of patients, and the fact that students in training assist in the clinic, I will leave to the judgment of others who have worked under these conditions. But creditable under the circumstances or not, it is useless to pretend that such results are satisfactory.'

"Nor is the situation improved when viewed by the number of visits made per patient. Opinions vary as to the number of treatments necessary to effect cure, but it will probably be admitted that small results can be obtained from only one or two visits, and that the majority of cures necessitate well over five visits.

"The percentage of patients making one visit only was 28.9 at Clinic A and 30.3 at Clinic B, while Davis found it to be 47.8. The percentage of patients making 5 visits or less is 52.8 at Clinic A and 61.8 at Clinic B, while Davis found 81.2 and Sanford 56. Certainly no one will deny that if 30 to 50 percent of the patients come only once, there must be a serious waste of the physicians' time and the clinics' money. Of 386 patients making five visits or less in the two clinics, only 1.8 percent were dismissed as cured."

The following statistical data in regard to gonorrhea patients are of interest:

Source of infection, Clinic A: street prostitutes, 36.6 percent; house prostitutes, 18.9 percent; domestics, friends and working women, 27.7 percent; wives, 1.5 percent; unknown, 14.7 percent. Of 662 patients in the two clinics, 305 (46 percent) admitted a previous gonorrheal infection; 361 (54 percent) were native-born; 544 (82 percent) were single; 141 (21 percent) were under 21 years of age; 408 (62 percent) were from 21 to 30 years of age; a total of 549 (83) percent under 30 years of age.

INSTITUTION LIBRARIES TO FORM LEAGUE

American Library Association Initiates Move to Stimulate Growth of Libraries—First Notice Sent Out

From the office of Miss E. Kathleen Jones, librarian at McLean Hospital, Waverley, Mass., the following notice comes for publication to the authorities in hospitals and similar institutions, which tells its own story:

INSTITUTION LIBRARIES LEAGUE

Upon the application of certain librarians interested especially in work in institutions, the American Library Association, at a recent meeting, voted to appoint an executive committee to further the formation and growth of libraries in hospitals (state, general and special), schools for the feeble-minded, prisons and reform schools. This committee, as organized, bears the name of The Committee on Library Work in Hospitals and Charitable and Correctional Institutions, and is composed of seven members: Miriam E. Carey, *Chairman, Supervisor of Institution Libraries, Minnesota State Board of Control;* Julia A. Robinson, *Secretary of the Iowa Library Commission;* E. Kathleen Jones, *Librarian at McLean Hospital, Waverley, Mass.;* Florence R. Curtis, *University of Illinois Library School;* Florence Waugh, *Supervisor of Institution Libraries, Nebraska State Library Commission;* Mary E. Eastwood, *New York State Library;* Carrie E. Scott, *Indiana Public Library Commission.*

The plan of the committee is to organize the various hospitals and other institutions in the United States and Canada into an INSTITUTION LIBRARIES LEAGUE, for the purpose of mutual help and exchange of ideas. The committee hopes that every hospital, general or special, which has a library or wishes to have one, will join this League. Communications in regard to it should be addressed to Miss Miriam E. Carey, State Board of Control, St. Paul, Minn. To be a member it is not necessary to be a trained librarian; in fact, it is to help the *un*trained librarian that the League is formed—that through it the services of those who have had experience in the work may be at the disposal of the others. Anyone, physician, stenographer, nurse, patient—whoever has charge of the library—is eligible to represent the hospital.

In addition to the formation of the League, the committee plans to publish, as soon as possible, the following monographs:

Survey of Institution Libraries.

Manual on Arrangement and Care of Books in Institution Libraries.

Syllabus of a Course of Lectures on Books and Reading, Suitable for a Training School for Nurses.

Bibliography of Occupational Work and Handicrafts in Hospitals.

"Campaign Material"—Statement of Reasons for Developing and Maintaining Institution Libraries.

That the bibliography of handicrafts may be as complete as possible, every hospital making a feature of this work, or specializing in any branch of it—embroidery, lacemaking, weaving, basketry, pottery, woodwork, etc.—is urged to send to Miss Jones, McLean Hospital Library, Waverley, Mass., a list of books, pamphlets and articles in periodicals which have been found valuable in this department.

The committee would also call the attention of the hospitals to the fact that there still remain a few copies of "A Thousand Books for the Hospital Library," which may be had for twenty-five cents each upon application to the A. L. A. Publishing Board, 78 E. Washington Street, Chicago.

Through the courtesy of the editors of THE MODERN HOSPITAL notices of the League and the work of the committee will be published from time to time in this periodical.

THE COMMITTEE ON LIBRARY WORK IN HOSPITALS AND CHARITABLE AND CORRECTIONAL INSTITUTIONS.

MIRIAM E. CAREY, Chairman,

E. KATHLEEN JONES,

Sub-Com. on Hospitals.

LETTERS FROM OUR FIELD EDITORS

TRANSFORMATION OF TRAINING SCHOOL

St. Louis City Hospital Acquires Control of School Heretofore Conducted Independently

Effective July 3, the City of St. Louis has assumed the responsibility of conducting a training school for nurses at the City Hospital. This is a move that has been desired for several years, but was not possible until the new city charter went into effect, permitting the conducting of a school. This work was formerly carried on by the St. Louis Training School for Nurses, a training school that has been in operation since 1883. This training school has always been operated in connection with the St. Louis City Hospital. This proposed change not only contemplates the conducting of a training school for nurses at the City Hospital, but also the establishment of a school for attendants and a training school for nurses at the Infectious Hospital and Tuberculosis Hospital of St. Louis, and for the organization and operation of a corps of visiting and district nurses. The control of the entire nursing situation will be vested in a nurses' board, operating in conjunction with the superintendent of the various institutions and with the hospital commissioner. Plans are also under way to establish a training school for attendants at the City Sanitarium. F. E. CHAPMAN.

News From the Pennsylvania Field

CHARTER FOR NEW HOSPITAL

Philadelphia's newest hospital, to be erected at 54th and Cedar avenue for the Sisters of Mercy, will be known as the Misericordia Hospital. The name was in the application for the charter filed by the Master, Francis L. Maguire, in the Common Pleas Court.

A fund of more than $200,000 was raised in the city and surrounding counties for the structure and within a short time the actual work of construction will be under way. It was originally proposed to call the institution the Mercy Hospital, but the Latin name was reported by the Master to be the one most likely to prevent its getting confused with other hospitals.

BEQUEST TO PRESBYTERIAN HOSPITAL

In the provisions of the testament of Phoebe A. Brown, who died recently at Prospect avenue, Chestnut Hill, $5,000 is bequeathed to the Presbyterian Hospital to endow a free bed in memory of a brother.

ASSISTANT DIRECTOR WILSON RESIGNS

Mr. Alexander Wilson, the fearless Assistant Director of Public Health and Charities, who has done so much good work for the city hospitals, has resigned his position in Philadelphia to become Director of Investigations in the Department of Charities, New York City. While a certain political element in Philadelphia will be highly pleased at the resignation of Mr. Wilson, those interested in the social welfare and efficiency of the city hospitals will regret his departure and can only hope that the good work started by Mr. Wilson will be continued. Mr. Wilson's successor is Edward A. Lees.

PRIZE AWARDED HEALTH DEPARTMENT

The International Jury of Awards at the Panama-Pacific Exposition has awarded a grand prize to the State Department of Health of Pennsylvania, and Dr. Samuel G. Dixon, Commissioner of Health, who planned the exhibit has been given honorable mention.

POST-GRADUATE TEACHING ASSOCIATION

An association has been recently formed in Philadelphia for the object of investigating the resources for post-graduate teaching existing in the city and arranging the courses offered by each hospital and college so as to obtain all the information in such form as to be readily accessible to those desiring to pursue post-graduate studies.

CHILDREN'S HOSPITAL COUNTRY BRANCH OPENED

On June 15, the Babies' Branch of the Children's Hospital of Philadelphia at Wynnefield was formally opened for the reception of infants and such other cases as the hospital considered suitable. It is proposed to continue the branch service throughout the year hereafter.

NURSES' HOME OPENED

The new Home for Nurses of the Germantown Hospital was formally opened on June 29 for occupancy. The building and equipment was the gift of Mrs. William G. Wardin as a memorial to her husband. The new building contains about 60 single bed rooms for nurses and is in close proximity to the main hospital building, and is constructed of red brick with terra-cotta trimmings.

SITE FOR MITCHELL MEMORIAL PURCHASED

The Board of Managers of the Orthopedic Hospital of Philadelphia have purchased the parish house of the Epiphany Chapel, 17th and Summer streets, as a site for a memorial building to the late Dr. S. Weir Mitchell. It is understood that the hospital paid $40,000 for the house and that it will be remodeled into a dispensary building in the near future.

WILLIAM H. WALSH.

LETTERS TO THE EDITOR

Fire Sprinklers in Hospitals

To the Editor of THE MODERN HOSPITAL:

In the article, "Safety from Fire to the Helpless in Hospitals," by H. F. J. Porter in a recent issue of your valuable publication, the author makes the following comment on automatic sprinklers:

"Sprinklers do not operate until a fire occurs and has reached a magnitude sufficient to develop a temperature in which human beings cannot long exist, and, as gases and smoke accompany this temperature, the physical and mental agony of the patients would have a very injurious effect on them, and probably many of them would be suffocated before they could be rescued from such an environment."

It is clearly obvious from this statement that the author is quite unfamiliar with the operation of automatic sprinklers and their record in controlling fires, which covers a period of many years. That "sprinklers do not operate until a fire occurs" is quite correct, but his reference to the magnitude of a fire necessary to operate sprinklers is not. According to the 18-year record of the National

Fire Protection Association, of 16,193 fires in sprinklered properties, each one of 4,864 fires was controlled by one sprinkler, and in 10,981 fires 69.4 percent of the total, not over 5 sprinklers operated in successful control.

Fires promptly checked in incipiency by automatic sprinklers cannot "develop a temperature in which human beings cannot long exist." The author accentuates this observation thus: "As gases and smoke accompany this temperature, the physical and mental agony of the patients would have a very injurious effect on them, and probably many of them would be suffocated before they could be rescued from such an environment." Verily, the author has a vivid imagination.

In respect to this, to say the least, erroneous opinion, it is sufficient to call attention to the tests made under the direction of Chief Kenlon, of the New York Fire Department, to demonstrate that automatic sprinklers will operate before the heat of a fire becomes unbearable. The test was made in a small house in the drill yard at fire headquarters. Firemen remained in the house until the fire kindled on the floor had been entirely extinguished by automatic sprinklers.

As a matter of fact, the average period of time from the beginning to the finish of a fire under automatic sprinklers is 2½ minutes. Sprinklers open normally between 30 and 60 seconds after fires begin, and extinguish the flames within 60 and 90 seconds.

And if the sprinkler does not put out the fire till it has attained the headway remarked, how is it that in thousands upon thousands of fires in properties equipped with automatic sprinklers not a life has been lost? At the 18th annual meeting of the National Fire Protection Association in 1914, the committee on safety to life reported that it had been unable to learn of a panic ever having taken place in a building equipped with a properly maintained system of automatic sprinklers, and expressed this opinion:

"In view of the fact that there are innumerable instances of lives being lost in similar properties without sprinkler protection, there is only one conclusion to be drawn from a study of these replies, namely, that the sprinklers have prevented the fires from making sufficient headway to even become a menace to the lives of those people in the building, and thus, by their action, may be said to have saved a tremendous number of lives."

In rendering its report at the 19th annual meeting of the National Fire Protection Association this year, the committee, in commenting on the slight recognition of automatic sprinklers in certain state laws, declared that the feeling of those who know sprinkler efficiency and the remarkable freedom from loss of life in sprinklered buildings is that allowances for increased numbers of occupants in buildings equipped with automatic sprinklers might be doubled with safety.

Automatic sprinklers began to be installed in 1875. Today more than 35,000,000 automatic sprinklers are in service. The economic effect of these devices since 1875 in terms of money is conservatively estimated to be more than $2,500,000,000 saved in reduced insurance premiums, losses of property and profits averted and conflagrations prevented.

For 18 years the National Fire Protection Association has compiled statistics of fires in properties in which automatic sprinklers are installed. Summaries of the statistics are published annually in the Association's "Quarterly." Recently the summary for 1914 was published.

The tabulations of the statistics for 1914 of fires in properties equipped with automatic sprinklers show that 1,479 fires were reported for the year and the total for 18 years is 16,193. Of the fires in 1914, 96.28 percent were successfully controlled by sprinklers; and in the 18-year period 95.28 percent were thus controlled.

A study of the tabulations of the 18-year period reveals that in the classes of occupancies given there are 39 classes, in which factory workers, particularly women, are in greatest numbers.

The 39 classes are only 28 percent of the total number of classes listed; in them occurred 48.3 percent of the 16,193 fires. But the proportion of the fires in these classes controlled successfully by automatic sprinklers is not 95.28 percent, but 98.2 percent!

In other words, in the classes of properties where the hazard of life from fire is most considerable, classes which number but 28 percent of the total and have nearly half of all the fires, the successful control of fires by sprinklers is 98.2 percent, nearly 3 percent above the general average!

And the 1.8 percent of the fires that were not controlled in these classes were not principally because water was shut off from the sprinkler system. But this percentage of imperfection is not that of automatic sprinklers, but of human error, and of that is low, far lower than it would be in the use of the bisecting fire wall, the worth of which as an assurance of safety to life is more imaginary than real.

The safety-to-life committee previously referred to is of the opinion that unwarranted credit is being given to horizontal exits in division walls; that is, bisecting fire walls, and that simply passing through such a wall in the same building does not guarantee safety to those who have escaped in this way. Several conditions of peril which are possible with the bisecting fire wall method of escape were explained by the committee.

Mr. Porter would render old and combustible hospitals safe with bisecting fire walls. His reasoning is that the safe thing to do is to get away from a fire instead of "getting" the fire before *it* gets away.

To "get" the fire, not to get away from it, should be the first law of safety!

NATIONAL AUTOMATIC SPRINKLER ASSOCIATION.
I. C. Hoagland, Secretary.

Color Scheme of Operating Rooms

To the Editor of THE MODERN HOSPITAL:

I note in the recent edition of THE MODERN HOSPITAL an inquiry and also discussion regarding color in operating rooms. As ours is a new hospital and strictly modern in every particular, and we have departed from the old idea of an all-white operating room, our experience may be of interest to some reader.

Our operating suite consists of a sterilizing room, operating room, anesthetic room, and surgeons' scrub room. Woodwork, walls and ceilings are all enameled in the same tone, which is dark cream.

The operating room is a large room in the northwest corner of the building, with three windows and a skylight, affording an abundance of natural light; but with this shade of color all glare is removed, making the light effect much more pleasing than the former all-white.

As we have never used anything but white clothing in our operating rooms, I would very much appreciate being told the advantages of black clothes.

LENA C. SHEIMERS, R. N.,
Superintendent Kleberg County Hospital, Kingsville, Tex.

Bonds have been voted for a county hospital at Susanville, Cal.

QUERIES AND ANSWERS

Sterilizer Top Control

To the Editor of THE MODERN HOSPITAL:

Which is better, oil pump or hydraulic movement for utensil and instrument sterilizer lids? We have had the oil pump and it has not always been satisfactory and is frequently out of order. We are now buying some new utensil sterilizers and wish to know if we can count on the hydraulic as being more reliable. A SUPERINTENDENT.

The hydraulic lift is more reliable and in every way better than the oil pump. It costs a little more, but is worth it.

Cotton or Wool for Blankets

To the Editor of THE MODERN HOSPITAL:

This hospital has always used all-wool double blankets that cost about $5.00 per pair; we must lay in a large new stock and are thinking about part cotton and part wool at about $3.00 per pair. What does THE MODERN HOSPITAL think about it? A PURCHASING HOUSEKEEPER.

All-wool blankets are nicer and softer; your private room patients are accustomed to that kind at home and will appreciate them in the hospital; ward patients, as a rule, are not accustomed to them, and will not notice their absence. You had better continue the all-wool for private room service; but a blanket 40 percent wool and 60 percent cotton will answer well for the wards, especially if it is well laundered when necessary. Blankets should be very carefully laundered, and they will serve twice as long and look far better if you can put them through the dry tumbler instead of "just shaking them out," as is often done. The dry tumbler fluffs the nap out beautifully and makes them soft and downy.

Cost of Laundry Work

To the Editor of THE MODERN HOSPITAL:

We have an average of 120 patients, and an average of 2,500 pieces of laundry per day; our laundry work costs us about $1.00 per hundred pieces, taking everything, large and small, flat and hand pieces. It is suggested that our work is costing us too much. What does laundry work cost others? A HOUSEKEEPER.

Conditions differ in hospitals, but taking the average, your laundry is not costing very greatly in excess of the average hospital laundry of that size, especially if you are doing careful work and getting your clothes clean, without tearing or unnecessarily wearing them out. Some large hospitals do their work for approximately 50 cents per hundred, but the cost goes up in proportion as the size of the laundry goes down. You are probably paying a good salary to your head laundryman, but if he is a good, careful, sober and saving man, you had better keep him. Perhaps you are doing too much handwork; one body ironer that costs about $175.00 will do much of the work that some hospitals are doing by hand; and a body ironer with one operator will do the work of four hand irons. It will do the collars, interns' suits, nurses' skirts and dresses, aprons, underwear; in fact, everything excepting the nurses' fancy waists. You might save something by looking into this feature of the work. If you can cut out two or three girls you will save that much.

If your laundry is saving your linens, you must credit that saving to its account. You cannot get your work done in a commercial laundry for less money than you are now spending, and your own laundry will give you far more satisfactory service. Your troubles will begin when you send your clothes out.

Disinfectants for Hospitals

To the Editor of THE MODERN HOSPITAL:

We have been using chloride of lime as a disinfectant in our hospital and find that it is destroying our plumbing. Can you kindly recommend a substitute?

INDEPENDENCE SANITARIUM,
Independence, Mo.
W. H. Callin.

Chloride of lime, in the way that you have been using it, has practically no antiseptic value. It is more of a deodorant. The only effective disinfectants for sinks and lavatories are hot water, steam, and some form of carbolic acid. Obviously, you cannot use live steam, but you may keep your waste pipes and trap valves clean by running hot water through them from your hot water faucet. It should be run for considerable periods of time, both for its flushing effect and the heat effect. Three or five per cent carbolic acid in rather large quantities will have an actual antiseptic effect in your waste pipes and sewer traps. It will be better to use the hot water. Carbolic acid, on account of the odor, takes us back to the old antiseptic period, which is a confession we should not make.

Fresh Eggs

To the Editor of THE MODERN HOSPITAL:

How are we to tell when an egg is "strictly fresh?" Ours is a state hospital and our eggs, as well as many other commodities, are contracted for; the contract for eggs calls for a "strictly fresh" egg. As a matter of fact our eggs are not bad, but they taste stale and many patients dislike them; the nurses and administrative officers will not eat them at all; yet the contractor insists he is living strictly up to his contract. A STEWARD.

A strictly fresh egg can be easily told by candling. It must be not only "clear" and the yolk firmly separated from the white; but the shell must show no air space—in other words, the shell must be full of meat.

In the spring of the year hundreds of thousands of eggs are put in incubators to hatch; a certain portion are not fertile, and the proportion of unfertile eggs is very large in the late winter and early spring laying. After four or five days of incubation the eggs are candled, when the embryo chick can be plainly seen. The eggs in which there is no developing chick are removed and these are sold at a low price. That four or five days of incubation at 103 degrees F. does as much harm to the eggs as that many months of cold storage, and incubator eggs are always stale and musty to the taste. Egg jockeys can do a good many things with eggs, especially in the arrangement of the classification, but they cannot fill the shell again after the water has been evaporated out in the incubator. You have probably been getting incubator eggs.

Take a wooden starch box, or a pasteboard box, large enough to set a candle upright in; cut a hole in one side, about the height of the flame, and about the shape of an egg, only a little smaller. Now set your candle upright on a table and set the box over it, after having removed the bottom end of the box. Now darken the room and hold your egg against the small hole so that you will have

to look through the egg at the candle. If there is an air space the egg is not "strictly fresh."

Where to Keep the Record

To the Editor of THE MODERN HOSPITAL:

Will you please advise us of the best place to keep patients' records while the patients are still in the house? Some of our doctors find fault when we hang the record on the foot of the bed, and others find fault if we do not keep it with the patient. W. T. B., Wisconsin.

The objection to hanging the record on the patient's bed is that the patient and visitors will look it over and are sure to find something that either they or the patient would better not know. The objection to keeping the record in the head nurse's office or at some other remote point is that the doctor wants it handy when he makes his rounds. So you have the two horns of the dilemma, and no matter which you choose you will wish you had taken the other.

On the whole, the policy must be dictated by conditions. If you have interns, so that every visiting doctor can have one to accompany him—and every doctor should have an intern—you can keep the records at some central point, and the intern can carry all the records of the cases of that particular doctor on the rounds, and refer to each in turn. If only a nurse, or the head nurse, makes rounds with the doctor, this plan is more difficult because there will often be a good many of them, and they are heavy. In any event the record should be there when the doctor sees his case, so that orders can be put down at once, before they are forgotten, and so that the doctor can size up the situation intelligently.

Perhaps the best way is to keep ward records in the rack of the head nurse's desk in the ward, and let the nurse get each one as the case is visited. For the private rooms, a drawer in the dresser is a good place to keep the record.

It will certainly add much to the efficiency of the service if the record can be near the patient, so that nurse and intern can make their notations without having to go long distances, and so it can be referred to handily; and it will cost many extra steps and a great waste of time if the record is not kept near by—and then again many an order has been put down wrong or not at all because the nurse or intern forgot the details in the lapse of time and because of many other orders. The carrying out of orders, too, has often been neglected in the temporary absence of the record.

Part-time Nursing

To the Editor of THE MODERN HOSPITAL:

We are asking information regarding the financial aspect of special nursing and think you can give us some suggestion as to how to meet the difficulties that are presenting themselves in that line.

To explain more fully I might cite the case of a patient who was here recently, and whose expenses were: room, fifteen dollars; special nurse, twenty-five dollars; board of nurse, five dollars, and physician's fee, probably about ten dollars per week; a total of fifty-five dollars. This same patient would probably have been cared for and have made the same recovery in a private hospital or sanitarium at twenty-five to thirty dollars per week, without a special nurse. When these facts are discussed by patients of both kinds of hospital the result is not in favor of the general hospital. Has part-time special nursing and the grouping of patients to arrange for this been a success?

Thanking you in advance for your kind helpfulness.

IDA B. VENNER, R. N.,
Superintendent Passavant Memorial Hospital, Jacksonville, Ill.

The best general hospital is that in which the largest number of diseases can be taken care of, and the greatest variety of social and financial problems met; in other words, the hospital ought to be able to take care of any disease from which a patient suffers, and it ought to be able to take care of any financial problem, the poor patient who cannot afford to pay anything, and the rich man who can afford all the luxuries. The hospital that fails in satisfying these two problems fails in a large part of its obligation to the public.

You will have patients who will want the highest class of rooms and who will want all sorts of luxuries, including a day nurse and a night nurse; and then you will have patients whose finances will just permit them to be in a private room, but who cannot afford special nursing. You ought to be in position to take care of these patients with your house nursing, without any expense to them. Your head nurses would direct their care and your pupil nurses would do the work.

We do not know of any hospital that does what you express in the term "part-time nursing." Either the patient has a "special" or he is being taken care of by the house nurses. He would pay a regular fee of $25.00 a week for a graduate special, with $5.00 or $7.00 a week to the hospital for the nurse's board; or he would have a so-called undergraduate special, preferably a senior pupil nurse in your hospital, for which some hospitals charge $10.00 or $12.00, and others charge $15.00 or $20.00. It seems you ought to be able to accommodate your patient and meet his financial ability.

You will agree with us that it is ridiculous that a patient in a $15.00 room should have $40.00 more piled on top of that amount—all "extras." We think you ought to have enough pupil nurses to let some of them do special duty, and see no reason why there should not be house specials, or undergraduate nurses, to the number of say one-half of your senior class. A hospital ought not to charge for the service of a probationer, a junior, or an intermediate; that nursing ought to be given as a part of the hospital service, but senior pupils ought to have a good deal of experience in private nursing, and placing say half of the class on special in the hospital should not be an excessive number.

Of course, we all admit that the hospital is obliged to nurse its patients properly, and the time will come, one of these days, when a patient will not have to have a "special" under any circumstances.

Interns for Small Hospitals

To the Editor of THE MODERN HOSPITAL:

It seems the large hospitals have no trouble getting interns, while it is almost if not quite impossible for the small hospital to find young medical graduates to serve as interns. We hear now that there is a movement on foot in the medical profession to make it still harder for small hospitals to get interns, by the appointment of committees in various states to work in connection with the medical schools and to select the hospitals in which interns may serve. Can you tell us anything about this new movement, and also any way by which small hospitals may secure interns? We have asked many superintendents about this, and the situation seems to be as hazy in their minds as it is in ours. A SUPERINTENDENT.

Nearly two years ago the Council on Medical Education of the American Medical Association appointed a committee for each state in the union, whose duty it was to investigate the hospitals, and to classify them according to their fitness to provide adequate practical training for young physicians before going into medical practice on their own account.

Several years ago this same council was largely responsible for the classification of medical schools according to their fitness for educating young men and women in the profession of medicine. Nearly one-half of the medical schools that were in existence when this work of classification began have been driven out of business, and many others are on the ragged edge. The result has been a vast improvement in the medical schools.

After three or four years of study of the field, the council came to the conclusion that the very best part of the medical training of young physicians was to be had in good hospitals; then came the question of which are the good hospitals? And what is a good hospital? These state committees were appointed to find out the answers to these two questions and to tack the answers to the hospitals in the several states.

In brief, these committees have set some standards; an acceptable hospital must have ideals; it must have good physical equipment in consonance with modern medical demands; it must have good medical men on its staff, capable of giving a good training to young doctors; but above all else it must have a teaching atmosphere, an atmosphere in which the patient is able to get the best in the way of diagnosis and treatment that modern medical science affords; an atmosphere in which every patient is a lesson to staff, to intern, to nurse and to the administration.

The hospital in which these things are to be found need not fear, but should rather welcome, the activities of the state committees of the Council on Medical Education of the American Medical Association.

As for a way to attract interns: these young men and women are eager to get a hospital, after their graduation, that will afford them the broadest and most convincing experience for their use in private practice when they are thrown on their own resources. Personally, I am of the opinion that what the small hospital may lack in the way of quantity and variety of clinical material, may be made up in the possible individualism of the training, which means the character of the men on the staff and their attitude toward the younger men working under their guidance.

All this means that if you want interns, you must prepare your hospital to give them a better training than they can get elsewhere, and then bring this fact to their knowledge as they leave their schools and are looking for intern service.

JOHN A. HORNSBY.

The Inventory System in Hospitals

To the Editor of THE MODERN HOSPITAL:

Can you tell us whether it is practicable to keep an inventory of commodities used in hospitals? We have tried it with some of our supplies, but it has been so cumbersome that we have come to feel that the cost of keeping the inventory is greater than the loss in not having it, and we finally decided to submit the question to THE MODERN HOSPITAL.

A PITTSBURGH HOSPITAL.

If the superintendent of the hospital insists on knowing what he is doing all the time, and checking up on all the institution's activities, he will want to know how his various stocks are being used and in what state they are. An inventory system of keeping account of furniture, linens, blankets, silverware and the things that are used until they are worn out, is not difficult, nor does it take much time in the keeping; it only requires discipline and order in the management that will report and record any worn-out pieces so that they can be subtracted from the stock lists and replaced if desirable.

But the keeping of an inventory of consumable things is a vastly different matter, and contemplates very rigid accounts of purchases and distributions. In order to keep such an inventory you must begin with the requisition of supplies by printed forms, serially numbered, and issued in duplicate, one copy to go to the seller and one to be retained for comparison; the storekeeper must keep his receipts and distributions in proper form, and I have sometimes thought the only proper place to keep the inventory is in the store room; the trouble about this is that it is difficult to get a storekeeper competent to keep up such a system.

GLOVES, RUBBER; SIZE . ROUGH

Purchases				*Distribution*				On Hand	
Date	Quantity	Price	Amount	Date	Quantity	Price	Amount	Date	Quant.

If the system is kept by the storekeeper, a transcript should be taken off daily by the superintendent's secretary, on a card index form such as accompanies this answer; that will serve two purposes, namely, to keep a constant check on the work of the storekeeper and also keep a list of the "things wanted" in the superintendent's office.

It is utterly useless to attempt a running inventory of perishable food supplies; the value of such information would not pay the cost of keeping it up.

Why not begin your system with a few items, such as soaps, rubber gloves, absorbent cotton, gauzes, hospital gowns and uniforms of various sorts, and then add an item now and then as you find it possible or desirable to do so?

In some hospitals heads of departments are required to keep an inventory of everything, to which the superintendent can have access when necessary.

Some excellent administrators have a specified day of the month on which to lay in the month's supplies, and quite a ceremony is made of the occasion; each department head is required to bring in a list of the things wanted, with necessary details, and to discuss the list with the superintendent to satisfy him that the last instalment was economically used, etc. Tradespeople are invited to come in on the afternoon of the same day and talk about their goods and make prices. This is a good plan, in that it gets the whole matter over with on one day of the month and gives the superintendent an excuse not to be bothered with salesmen at any other time. But it has many disadvantages; the salesmen of many good houses will not be able to "make the town" on that particular day without added expense; exceptionally good bargains are to be had occasionally, and if tradespeople know that the superintendent will not consider purchases except on his regular buying day, they will offer their bargains elsewhere.

All these things must be taken into account when thinking about an inventory system, because they are the chief reasons for such a system.

JOHN A. HORNSBY.

The new pavilion of Dr. Depage's hospital at La Panne, Belgium, was recently reduced to a mass of smoking ruins by a fire originating from an explosion of the apparatus for generating gas. The pavilion, with accommodation for 250 patients, had been completed but a few days before its destruction. There were no casualties.

NEW INSTRUMENTS AND APPLIANCES

VINCENZ MUELLER, Technical Editor.
GEO. W. WALLERICH, Associate Editor.

Apparatus for the Administration of Warm Ether Vapor

BY DR. J. W. SNYDER, Michigan City, Ind.

The apparatus devised by Dr. Snyder consists of two parts only: the well known wire mask, to which a dome-shaped metal casing is fastened, reaching part way down over the mask; and the heating coil. The metal tube containing the electric heating coil may be quickly attached or removed from the mask, by a slight turn to the right.

The coil, as may be seen from the illustration, is contained in a perforated metal shell and wound for use on the 110-volt current. This is so constructed that it will reach a maximum temperature and cannot become overheated, even if it stays connected for an indefinite time.

Dr. Snyder's apparatus for administration of ether vapor.

About twenty minutes before starting an anesthetic the attachment plug is attached to any convenient socket and the mask is prepared with layers of gauze. After the coil has reached the maximum heat it is connected to the mask, which is placed over the patient's face. The anesthesia proceeds then in the regular way, except that the ether is dropped through the metal tube on the coil instead of on the gauze direct, and from the coil it reaches the gauze in the consistency of warm vapor.

The ether is to be given more slowly and in smaller doses, inasmuch as it reaches the patient more quickly than when it is dropped cold on the open mask. Consequently the total amount of ether consumed during the course of an operation is only about one-half that by the ordinary open method. The doctor claims that a number of other advantages result from the use of this device, such as the patient going to sleep more easily and without coughing or holding the breath; the absence of mucus from the air passages, except in extremely prolonged cases; great ease in maintaining anesthesia; a brightness in the patient upon awakening and absence of postoperative nausea and vomiting.

An Improved Dry-cell Battery for Cystoscopy

The usefulness of the dry-cell battery, manifested particularly in its portability and freedom from shock-giving proclivities, has been considerably lessened by two great disadvantages, so far as the illumination of cystoscopes is concerned. The first of these is that the cells require renewal at not very great intervals; the second, that during the latter part of the life of the individual cells the decrease in the amount of current generated is so rapid

Moorehead illuminating battery.

that it is not possible to complete the examination of the bladder without altering the resistance in the rheostat, a procedure fraught with considerable peril to the cystoscopic lamp. The former objection is reduced to a minimum by the use of tungsten cells, which have much more endurance than the older type of cells, while the latter may be entirely done away with by the insertion of a current indicator in the circuit.

The mode of operating this device is as follows: before the insertion of the cystoscope into the bladder the amount of electricity required to heat properly the filament (as indicated by the ammeter, which is mounted in the battery case) is carefully noted. Later in the examination, if the illumination becomes unsatisfactory, a glance at the dial indicates whether the fault lies with the electrical supply or whether it is to be sought in other directions, such as clouding of the medium by blood or pus. If the amount of current indicated be less than that found to be necessary at the beginning of the examination, the remedy lies in reducing the resistance offered by the rheostat till the meter registers the desired amount of current, the change being made without fear of burning out the lamp. If on the other hand the meter should read as at the beginning of the examination, the remedy lies in washing out the bladder or cleansing the lenses, under which circumstances it were folly to risk the destruction of the lamp by increasing the current, as might well be done were the condition

not indicated by the ammeter. Under such circumstances the operator may well be saved the annoyance of inserting a new lamp.

The apparatus was originally constructed to meet the above indication, which it has done in a most satisfactory manner. It has also proved useful in locating short circuits, whether these occurred in the connecting cables or in the cystoscope itself.

The battery illustrated contains twelve small tungsten cells, such as are regularly stocked by electrical supply houses, arranged in a manner to furnish current in the most economical manner possible.

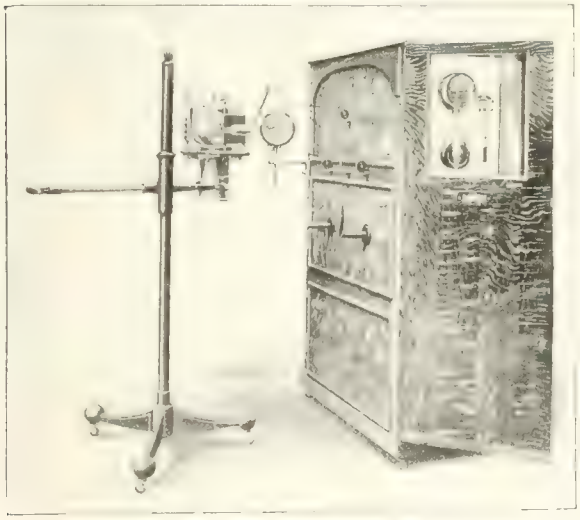
A New Type of X-ray Apparatus

Members of staff of hospitals will welcome the advent of a noiseless x-ray apparatus which may be placed in close proximity to the operating room without the slightest distraction to the surgeon. This apparatus works on an entirely new principle, and the high tension alternating current delivered by transformer is rectified by an electrical process, without resort to mechanical devices, valve tubes or chemicals of any kind.

The equipment is known as the Hogan Silent X-ray Transformer, and as the makers state, it is interrupterless, motorless, commutatorless and noiseless on alternating current.

With this new apparatus, tubes can be excited to high penetration without inverse, and especially fine results are obtained in soft tissues, revealing pathological conditions in lungs, kidneys, stomach, and so forth.

One of these transformers has been installed for the past nine months in the Washington Park Hospital of Chicago, where it has made a record for the institution in the amount of x-ray work it has attracted.



The Hogan Silent X-ray Transformer.

A unique feature is the lead-lined protective door, which, when swung outward, serves as a screen to the operator, and when closed, occupies but little space. A fluoroscopic screen may be fitted to the outside of the door and the patient placed against it, and by looking through the lead glass window the operator will be able to observe the visceral organs or examine fractures with perfect immunity from the ray. This arrangement costs but a fraction of the price of other fluoroscopic devices.

Eastman Kodachrome Process as Applied to Medical and Surgical Pathology

Physicians and surgeons often require some means of recording phenomena which come to their notice, and especially phenomena in the progress of skin diseases. The use of photography for this purpose has been limited by its failure to render the color differences which are of such importance in medical work, and it has hitherto been impossible for any one by a study of photographs to obtain information in any way comparable with that which could be got from a direct study of the subject. To make photography applicable to the whole field of medical work it is essential that the record should be made in colors.

Fig. 1. Electric light stand with 750 watt C. P. lamp.

The only process hitherto available to the practicing physician or to the hospital surgeon for color photography was the screen plate process, which involves extremely lengthy exposure and gives a result in which, though the color rendering is excellent, the surface is necessarily broken up by the screen structure, which interferes to some extent with the accuracy of diagnosis.

The principle of the screen plate process is to divide the surface of the plate into a number of microscopic filter units—red, green and blue-violet—and then to take the picture through these units upon an emulsion from which a positive is made either by reversal or by the ordinary photographic methods, this positive being registered with the screen, so that where the emulsion was blackened by exposure through one of the filter units, light is transmitted through that unit in the finished picture. Suppose, for example, that a red object is photographed on a screen plate. Then, where the image of the red object falls, light will pass through the red filter units and will affect the emulsion beneath so that it will be blackened after development, while where the emulsion was protected from the red light by the green and blue units which absorb it no effect will be produced. Now, if the developed negative

be converted into a positive, the portions of it under the red filter units will be transparent, while those under the green and blue filter units will be opaque, so that on viewing the picture the red object will be represented only by the red filter units, the other units being blocked out, and will consequently appear red. The Lumière Autochrome plate represents this process in its simplest form, the filter screen being coated upon glass and the emulsion on top of the screen, while the negative itself is reversed and converted into a positive so that it remains always registered with regard to the screen.

A theoretical investigation showed that for a great deal of work three colors were not really necessary, and this is especially true where the colors to be dealt with are those which occur in medical subjects; namely, the reds and yellows of skin and tissues. For these colors a two-color process should be almost as perfect in color rendering as the three-color process, and would certainly be sufficiently accurate to enable a first-rate idea of the condition of the

Fig. 2. Illuminator in which pictures are placed for examination.

original to be obtained. Clearly, the simplest possible color process will be one in which two negatives taken under two filters are directly transformed into the color positives, the red negative being turned into a green positive and the green negative into a red positive and the two then placed face to face to make the completed picture. Such a process would employ no loose films and only the minimum number of glass plates, and there would be no transferring of pictures from one glass to another. The final difficulty of registering, also, is reduced to a minimum. Moreover, if the original negatives can actually be transformed into color positives, we may expect to retain in the positives all the gradation in the original negatives. The gradation by this process should consequently be as good as can possibly be obtained. Also, since there is no screen and the highlights are represented by clear unstained gelatin, the transparency should be equal to that of a black and white subject.

It will be noticed, however, that this proposed method of working involved one very big step which had never yet been solved; namely, the direct transformation of a negative in black silver into a positive in which the silver of the negative was represented by clear gelatin and the places that were lightest in the negative by a full strength of any colored dye that might be chosen, the transformation being correct throughout, so that all the graduation of the original negative was reproduced in the resulting positive. It was this specific problem of transforming a silver negative into a dye positive, the working out of which made the new Kodachrome process possible. Although the solution now appears simple, it involved a great deal of experiment, small changes in the procedure having much influence on the result, so that a satisfactory process was achieved only by continual experiment.

The method adopted is to make the negatives on panchromatic plates, through the correct filters, and then to develop them as usual. They are then chemically treated so as to remove the black silver and to leave the plate looking just like a colorless sheet of gelatine, showing no sign of an image. Then this plate is put into the specially prepared dye bath. The dye goes into the gelatin most easily where the silver was absent in the negative; that is, where there was least light in the original photograph or in the part represented by deep shadows; while in the parts corresponding to the highlights, where there was much silver in the negative, the dye penetrates more slowly, so that as the dye slowly enters the film, the original negative is transformed into a positive produced in a colored dye. While the one color is made in this way the companion picture is also dyed in the other color, and the two when placed together make the finished picture. The process is thus seen to be simplicity itself, the novel point of it being the method for transforming a black and white negative image into a colored dye positive.

The results obtained by this process are very satisfactory in dealing with such subjects as are required in medical work. The pictures appear at their best when placed in a special illuminator, and for this reason illuminators are provided which light them evenly from behind by electric light. The process cannot be used for the production of paper prints, and in most cases it is convenient to transform the original negatives into the finished positives, as has already been described; but, if desired, duplicates can be made by making contact positives from the original negatives, before bleaching, from which new negatives are printed, which are then transformed into the color images. The results obtained are quite permanent, the colors being fast against both light and heat. While the process was originally introduced for professional portraiture, its application to the science of pathology, in the study of intricate or involved cases, was immediately recognized. Members of the medical profession who have seen the results are enthusiastic in their comments and pronounce the Kodachrome process to be of special value in recording the progress of skin diseases. The results under treatment may be studied with almost the same accuracy possible from examination of the subject.

In the study of pathological specimens and dissections of the human body in applied anatomy, this new process in color photography opens up an extensive field to all students and practitioners of medicine and surgery. It will also materially aid the specialist in nervous and mental diseases in the study of facial expressions, and the surgeon in illustrating work in the operating room.

The equipment for taking Kodachrome pictures, for medical and surgical purposes, is an 8x10 camera, an electric lamp of 750 watts c. p. (Fig. 1), an illuminator in which the pictures are placed for examination (Fig. 2), and the necessary plates, chemicals, etc.; and we are informed that the total cost of such an equipment is from $394.00 to $415.00.

THE HOSPITAL KITCHEN

Any questions regarding equipment or other matters connected with the kitchen and dependent departments of food storage and service will be answered in this department. Address communications to The Modern Hospital, Kitchen Department, Metropolitan Building, St. Louis.

Electric Cooking Appliances[1]

(Second Article)

BY HARRY G. WEEKS, E. E.
Designer and Consulting Engineer in Electrically Heated Appliances, Chicago, Ill.

Probably the electric cooking appliance most in use at present is the combination electric griddle and toaster. The advantages of an electric griddle and toaster are, first, the quick heating attained by the method of first using the high heat, then shutting off, leaving the second heat to do the work; and secondly, the entire absence of the gas fumes which, in the case of a gas griddle and toaster, are disseminated in the room, owing to the fact that there is usually no flue on such a griddle. The heating on an electric griddle is absolutely regular, so that the cooked product is uniform. When toast is desired, the intense

Fig. 1. Electric griddle.

heat gives that rapidity of action which is essential to good toast, quickly searing the outside without drying out the inside of the slice, or the toast can be made crisp clear through.

In hospital practice the electric griddle and toaster attains its greatest utility in the ward kitchen. Toast can be made on it, steaks, ham or bacon broiled on it, and the top griddle used for heating any cooking vessels; in fact, any cooking operation except baking can be accomplished on it. In a ward kitchen, owing to the intermittent use of the appliance, the amount of current consumed per day will not be very large for the reason that when not in use the current is shut off, so that the cost of fuel is hardly any higher than gas.

To secure durability of construction the top of the combination griddle, broiler and toaster should be of cold-rolled steel, polished down until it is perfectly flat, and the body of blue Wellsville steel with bands of cold-rolled 16-gauge steel at top and bottom, polished, nickel-plated and buffed. The upper band should carry a nameplate on it, on which should be stamped the electrical rating in volts and amperes (this being an underwriters' requirement). The body should be provided with several ledges about an inch apart to carry the broiler rack and drip pan, so that these can be slid in on the ledges at any desired distance away from the heating element. The lowest ledge can be used as a Salamander for preparing foods au gratin.

The heating element is designed to give uniform heat on every one of the three different degrees of heat regulation. The regulation should be by means of an indicating dial switch which reads, high, medium, low, off. The connecting cables should be specially constructed so as to have no rubber in them, but should be composed of asbestos wrapping and an asbestos braid over all, made watertight by an asbestos cement. The conductors should be carried in conduits to meet underwriters' requirements and be located so as to be free from danger of mechanical injury. This appliance should be wired in permanently, but when desired it may be provided with attaching plug.

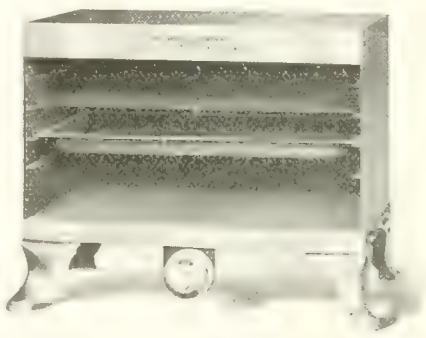


Fig. 2. Combination electric griddle, broiler and toaster.

Fig. 1 shows one of the latest types of electric griddles and toasters on the market. They are made in three sizes: 12x18, 18x24 and 24x30 inches, with three heats, which gives a sufficient range of temperature.

Like most of the electric appliances in the market, the griddles and toasters hitherto made have lacked the substantial qualities essential to the heavy duty of hotel, restaurant and institution work; but the modern griddles made under the above specification are substantially made and dependable.

The current consumption is:

Size	Watts per hour high heat	Watts per hour medium heat	Watts per hour low heat
12 x 18	1,500	750	375
18 x 24	3,000	1,500	750
24 x 30	3,600	1,800	900

A steak one inch thick will be finished in from eight to ten minutes; toasting will take from two and a half to three minutes.

The griddle shown in Fig. 2 is made also without the toasting and broiling space below, but the extra cost of this toasting and broiling space is amply compensated for in

Fig. 3. Electric grill or hot plate.

the more varied uses to which the complete appliance, as shown here, can be put. The cost of the griddle alone is only about half that of the combination griddle and toaster, but it can be used only as a hot plate for making cakes, etc., and consequently its range of utility is limited.

[1]The first article by Mr. Weeks was published in the June issue, page 445.

The sizes and the current consumption are the same as those of the combination griddle and toaster.

ELECTRIC GRILL AND HOT PLATE

The appliance shown in Fig. 3 is called a grill or a hot plate. It consists of open coils stretched between the bars of an open cast-iron grill. It can be used for either toasting or as a hot plate for boiling or frying, or a small oven can be set on it for small baking operations. These appliances are made in two sizes, 10x15 inches and 10x30 inches, taking respectively 1,500 and 3,000 watts per hour on high heat, 750 and 1,500 watts on medium and 375 and 750 watts on low heat, per hour.

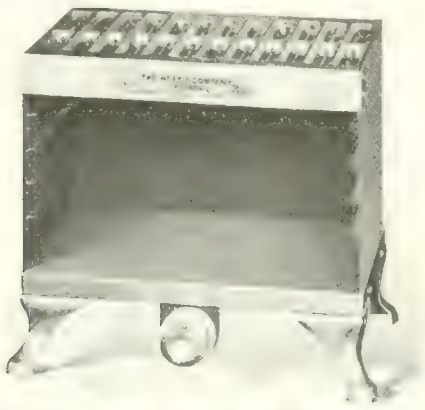


Fig. 4. Combination electric grill, broiler and toaster.

Fig. 4 shows the same appliance as does Fig. 1, except that the open grill top of Fig. 3 is superimposed on the toasting and broiling bottom shown in Fig. 1. This appliance will be found useful where a cake griddle is not necessary and a more quickly acting hot plate is desirable. With this appliance toast can be made both above and below at the same time. The small size will turn out toast at the rate of 300 slices of toast per hour with a current consumption of 1½ kilowatts, which, with electricity at 2½ cents per kilowatt, makes a cost of .001 of one cent per slice.

Fig. 5. Electric egg boiler. Water at 180° F.

Fig. 5 shows an electric egg boiler. In order to avoid an excess of steam in the room and to cook the eggs at a temperature not too high for the best results, the heating is so arranged that the temperature cannot rise above 180 degrees F. The timers are graduated so that it is possible to boil eggs from a half minute to six minutes. Six minutes' boiling, with water at 180 degrees, gives an egg thoroughly cooked, but not hard. On the top of each timer there is a timing rod on which are the graduations. The rod is first set at the time desired. A spring catch engages the rod which holds it in the set position. The bucket holding the eggs is then lowered into the water. At the predetermined time the timer releases the bucket and a weight draws it out of the water.

The timers are made entirely of brass with the one exception of a phosphor bronze spring. On account of the tendency to rust out, no steel parts should be used. A recent improvement is the rubber cushion under the weight, which reduces to a minimum the jarring effect on the timers and insures a longer period of accuracy. The boilers are fitted for from two to six timers. Each timer will take care of three eggs at a time. The boilers are made of heavy copper, polished and nickel plated.

Automatic egg boilers heated by gas or steam coils have been in use a long time, but in these the water is always at 212 degrees and gives off steam in the room.

The current consumption to maintain the water at 180 degrees F. is as follows:

4-bucket egg boiler.....1,500 watts per hour
3-bucket egg boiler.....1,000 watts per hour
2-bucket egg boiler..... 500 watts per hour

The heating of urns for coffee, etc., by electricity has been in use for some time. The heat unit is placed on the bottom of the urn, and the three heats provided are controlled by switches. The current consumed will be approximately as follows:

Gallon capacity	Watts high heat	Watts medium heat	Watts low heat
2	1,000	500	250
4	2,000	1,000	500
6	3,000	1,500	750

With the high heat turned on the urn full can be brought to boiling point in 30 minutes and the temperature maintained with the medium or low heat.

A Diet Kitchen to Serve From Thirty-five to Fifty Persons

BY P. B. SCHWEIKERT.

The accompanying plan shows the equipment necessary to take care adequately of the diet work for thirty-five persons, or up to fifty if necessary.

A range, the body of which is made of cast iron, will be found to be very much more durable than one made of sheet iron, and when finished in black enamel is easily kept clean and requires no stove polish except on the actual cooking surface. The range shown has six holes on the cooking surface and one large and one small elevated oven with a broiler and toaster below the larger oven. The smaller oven can be used as a plate warmer if desired. The bottom of the larger oven should have a removable griddle plate in it and a damper in the flue to be opened when the griddle is in use, so that cakes can be made when desired. The broiler and toaster should be removable in case it is desired to set high cooking utensils on the back of the stove. When it is desired to boil anything with an odor, such as cabbage, etc., this can be done on the plate in the oven, and the door shut and the flue opened so that no odors can come into the room. The oven should be furnished with an oven thermometer. The cooking surface of the range should not be over 28 inches from the floor, so that the oven will not be too high up.

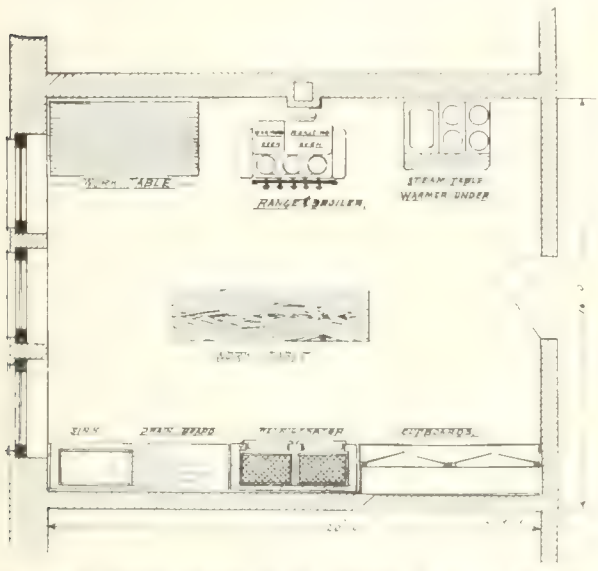
Sheet iron ranges are about 33⅓ percent cheaper than cast iron ranges, but because of the greater thickness of

material used in the latter their life is longer, and delicate bakings like cakes, etc., do not burn on the bottom as they do in ovens in which thinner material is used.

The steam table shown is 42x24 inches and contains one meat panel with cover, and two vegetable panels, each containing two vegetable jars with covers. The panels should be of cast iron, porcelain enameled, and should be provided with water rims to form seal, etc., to prevent the steam from getting out into the room. The water pan should be constructed of either 32-ounce copper or 14-gauge genuine charcoal iron, but should never be of steel or of light weight copper inside a steel pan. A waste outlet should be provided as well as an inlet water tap for refilling or flushing. The waste outlet should always be at the opposite end from the refilling tap.

The steam table can be mounted on legs, with a shelf beneath, or on a plate warmer with sliding doors. It is better, to lessen the stooping, and to make easier access for cleaning, to have the plate warmer above the table; and where appearance is to be considered the whole can be finished in white porcelain enamel on steel, trimmed with nickel bands.

The refrigerator shown is 5 feet wide, 28 inches deep



Plan of diet kitchen to serve 35 to 50 persons. Specially designed for THE MODERN HOSPITAL by P. H. Schweitzer.

and 8 feet 6 inches high; this size may be larger than is absolutely necessary, but it will afford all the storage likely to be required for a diet kitchen of this size. The subject of refrigerators has been dealt with in a previous article in this department.

The work table shown is 6 feet by 3 feet, and may have either a steel top or one of not less than 1⅜-inch maple, mounted on iron-pipe legs with a galvanized iron shelf underneath and a drawer.

A cupboard, 7½ feet by 28 inches, at the bottom, with a shelf and cupboard 15 inches deep above, the whole 8 feet high, is shown on the plan.

A sink and drain board is also shown, placed next the window. This will always be found when practicable to be the best position for a sink, as good light is essential.

The kitchen shown on the plan measures 16 feet by 20 feet, and is large enough for a table 2 feet by 8 feet to be placed in the middle of the room and still leave 4 feet of working space on either side of it. The equipment shown can be set in a room 16 feet by 12 feet, which would accommodate thirty-five persons; but for fifty persons the larger room, with a table in the center, would be preferable.

The door of a diet kitchen should not be less than 3 feet 4 inches wide in order to give room to pass in and out with loaded trays; and there should be as much window light as possible. Where the floors are of concrete they should be finished with a hard top coat, water and grease-proof.

GRADUATE NURSES ARE CONTRACT LABOR

Federal Immigration Bureau Decides They May Not Be Brought From Canada to Serve in Salaried Positions —Decides Also That Nursing Is Not a "Recognized Learned Profession"

Some months ago the immigration agent at Cleveland, Ohio, found fault with the municipal hospital of that city because its superintendent had advertised in some Canadian newspapers for pupils for the training school. Hon. Newton D. Baker, Mayor of Cleveland, took the matter up in an exhaustive legal argument with the federal authorities and obtained from the Department of Labor a decision that the advertisement for, and the bringing in of Canadian girls as training school pupils was not in violation of the contract alien labor law, and might be continued. Nothing was said in the course of this controversy about graduate nurses who might be engaged in Canada to serve in salaried positions in the hospitals of the United States.

As soon as the facts of this controversy were published in THE MODERN HOSPITAL, in the April, 1915, number, Mr. George B. McCallum, secretary of the Cooley-Dickinson Hospital of Northampton, Mass., feeling that there were incongruities between the published decision and a decision which had previously been received by him personally, wrote to the Commissioner, and the reply, when it came, contained such definite statements as to the attitude of the department that he sent the letter to THE MODERN HOSPITAL for publication. It is as follows:

U. S. Department of Labor.
Bureau of Immigration.
Washington, May 1, 1915.

Mr. George B. McCallum, Secretary
The Cooley-Dickinson Hospital,
Northampton, Mass.

Dear Sir: Answering your letter of the 24th ultimo the Bureau has to state that it has never seen the article to which you refer as appearing on page 294 of the magazine called THE MODERN HOSPITAL. However, the Bureau can state in a general way what the recent decisions of the Department with regard to the admission of trained nurses to the United States have been.

Several years ago it was held that women who were being trained in hospitals as student nurses could be admitted to the United States without violating the alien contract labor provisions of the immigration act. Several months ago it was discovered that the privileges accorded in this decision were being materially and seriously abused; that several large hospitals in this country had established a regular practice of sending to Canada for trained nurses and hospital attendants, not for the purpose of having them attend their training schools for nurses, but in order that they might work in the hospitals as nurses already trained or as mere attendants who were in no sense students of nursing; that by this means the said hospitals were able to obtain help of the kind required at wages much lower than they would have to pay women and girls already located within the United States to induce them to accept the positions. Obviously this constituted a violation not only of the letter but of the very spirit of the contract labor law, which was intended to prevent the importation of aliens to take positions in the United States that could, and otherwise would, be filled by persons already located here.

The purpose of the recently rendered decisions, therefore, has been so to apply the law as to prevent the abuse which had arisen because of the Bureau's liberality in admitting student nurses, and to restrict the admission of aliens connected with the vocation of nursing to those coming here for purposes of study rather than to take remunerative positions and to compete with local nurses and attendants.

With respect to the law bearing upon this subject the following might be furnished for your information:

Section 2 of the Immigration Law (Act of February 20, 1907) provides that:

"Persons who have been induced or solicited to migrate to this country by offers or promises of employment or in consequence of agreements, oral, written or printed, expressed or implied, to perform labor in this country of any kind, skilled or unskilled,"

are to be considered contract laborers and excluded. A proviso to the same section reads:

"That the provisions of this law applicable to contract labor shall not be held to exclude professional actors, artists, lecturers, singers, ministers of any religious denomination, professors for colleges or seminaries, persons belonging to any recognized learned profession, or persons employed strictly as personal or domestic servants."

This proviso to the law constitutes a specific guide for the Department, and aliens applying for admission to this country to accept prearranged employment who do not fall within the classes enumerated in the exception must be refused admission; for special exceptions of this kind must be construed strictly against those seeking the benefit thereof; or, as the Supreme Court puts it in a recent decision, "the section (Sec. 2) contains its own specific provisos and limitations, and these, on familiar principles, strongly tend to negative any other and implied exception" (Lapina v. Williams, 232 U. S. 78, 92). Nurses are not specifically mentioned in the exception, and the Department has held that nurses do not belong to a *recognized* learned profession.

Respectfully,

ALFRED HAMPTON,
Acting Commissioner-General.

Attention is called to the last sentence.

HINTS FOR HOSPITAL SUPERINTENDENTS.

Do not allow anybody to persuade you to put cheap plumbing into your new fireproof building. The day of iron or steel pipes has gone by. They not only corrode and eventually wear out, but they are constantly giving off red rust water that is objectionable. We are using now white metal, made of nickel and copper, or, at the very least, we are using nickeled brass; or, for hidden plumbing, the pipes need not be nickeled. Brass and white metal do not corrode, and in new construction, where the pipes are hidden in concrete, as in some places, and in rises in the walls at others, it is an extremely difficult thing to get at these pipes to change them, and if they are made of steel or iron, it is certain that they will have to be reached after two or three years.

And don't let anyone sell you cheap plumbing fixtures. We often are limited for money when we are building a hospital, and instead of saving on ornamentation and things that look pretty, we are disposed to save on the quality of our fixtures and equipment of various sorts. This is a costly saving. Cheap faucets and cheap fixtures of various sorts wear out very quickly; bath tubs, basins and lavatories are the last things on which to economize by putting in inferior goods. The cheap enameled fixtures break down after two or three years, either by checking and turning yellow and finally black, or the enamel wears off completely and leaves the bare steel. They are making porcelain china now that costs more than enamel, but far less than the old expensive porcelains, and these new porcelains will wear indefinitely and always look well. It is generally a good deal easier to get money to build a hospital than it is to find money to make up deficits from year to year, and when we put in cheap fixtures our expensive repairs begin after a couple of years of wear, and the up-keep account becomes a very large item in our running expenses. We ought to build so that the repair bills will be negligible for eight or ten years anyway.

A little initiative on the part of the superintendent of the hospital will often save considerable sums of money. Little architectural changes may be needed, and too often we think we must go to an architect and have a plan made and take bids and let a contract; whereas many of these changes could be made by our own mechanics. Generally the engineer is an all-round handy man who can do a lot of things that too often we call in experts to do.

The attic and lumber rooms of many hospitals are stored with stuff that we call "junk" and very often these things could be made to serve useful purposes, if we just exercised a little ingenuity. Door frames and doors, window frames and windows can often be used, saving the purchase price of new things, and saving also the employment of experts to instal them.

Are you quite sure that your hospital is a blessing to its community? You can only be sure of this if you are certain that you are getting good results in your medical and surgical work. How are you going to know whether you are getting good work or not? The only way is to have your histories and records well written, diagnoses and results clearly stated on the discharge of the patient, and then follow cases into the homes of the patients. The cases that come back for a second and third operation are worth looking into, and it is these cases that will come nearer to giving you a line on the kind of work that your surgeons are doing than anything else.

It is coming on summer time, and we should think about the preservation of our ice supply. Our refrigerators, during the winter, spring at the hinges, the door fastenings get loose, leaving cracks to admit warm air, and the entrance of warm air melts the ice and raises the temperature of the refrigerator. A few hours' work over the house will often put all our refrigerators in good order so that the ice will last much longer, and things will keep much better.

Sometimes we want more refrigerator room, and we think about buying an expensive ice box or refrigerator. Very often we can take part of a room that is too large for its present purposes, run up a partition of three-inch vitrified tile or gypsum, and insulate the lining of it so that we can have a very serviceable cold storage room. After the partition is up, a line of upright two-by-fours can be put all around this new room, with two-by-fours on the ceiling, also some plain boards nailed on to these, some cork or asbestos paper, or even tar or oiled paper laid over those, and then a layer of tongue-and-grooved flooring can be put on. This will make very good insulation, and if a double door with air space between the layers is added, we will have a room which, when three or four good cakes of ice are put in, will keep things cold and nice.

The front office and the telephone booth can be counted on to indicate clearly the kind of hospital one is entering. If the business office allows patients to stand around, and find out things the best way they know how, and allows sick people to hang around the office until it is convenient to take them upstairs, you can be pretty sure that the whole management of the hospital is slipshod and slovenly. The difference in wages between a good telephone girl and a worthless one is three or four dollars a week, and yet there is hardly a day that a good telephone girl could not earn her whole week's salary by being alive on her job. Very often a doctor will call up to send a patient in; if he cannot get good service through the telephone, he may persevere once or twice, but he will finally begin calling up that hospital where he can get prompt action through to the party with whom he must make arrangements. This good and bad telephone service goes clear through to all parts of the house. If a doctor knows that he is going to find it almost impossible to get his intern or nurse he will want to patronize a hospital that will give him decent service.

Armour's LABORATORY PRODUCTS

A uniform preparation is more dependable than a "catch-as-catch-can" product thrown together in small lots.

Corpus Luteum
Powder
Capsules
Tablets

Pituitary Liquid
Physiologically Standardized
1-c. c. ampoules

Pituitary
Anterior
Posterior
(Powder and Tablets)

Duodenin
Tablets—1 gr.

Thyroid Powder
" Tablets
2 gr., 1 gr., ½ gr.

Elixir of Enzymes

At this season the Alimentary tract must be considered. Elixir of Enzymes is recommended in stomachic and intestinal disorders. It is also a good vehicle for the iodids, bromids, etc.

Literature on Request

ARMOUR AND COMPANY
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Hide Bran
In a Breakfast Dainty

Clear bran, as you know, isn't likable. And in most combinations it suggests a forced diet.

In Pettijohn's it doesn't. These are flakes of soft wheat with a luscious flavor. We roll the bran into them—unground bran, 25 per cent.

Some folks suspect it and some don't. All folks like the food. It is to many their favorite morning cereal. Yet its bran content is efficient.

Many thousands of physicians, after tests, are advising Pettijohn's today.

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PACKAGE FREE

We will mail to any physician a full-size package for testing at home or with patients. Please ask us for it.

Most better-class grocers sell Pettijohn's for 15 cents per package. It has national distribution, so any grocer can get it from his jobber. For free package address

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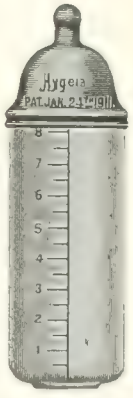

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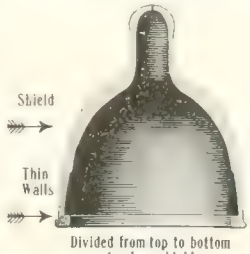

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City..... State.....

NEWS OF THE HOSPITALS AND SANATORIUMS

A hospital is being erected at Okeene, Okla., for Dr. H. Blender.

A $25,000 county hospital will be built at Aiken, S. C., this summer.

Dr. R. F. Godard is having plans drawn for a private hospital at Quincy, Fla.

A new maternity ward has recently been opened at the Moline (Ill.) Public Hospital.

The government is erecting a sanitarium for the Mescalero Indians at Mescalero, N. M.

A hospital, among other new buildings, is being erected for Yale College at Changsha, China.

A hospital was opened in Wenatche, Wash., June 27, by the Methodist Deaconess Hospital Association.

A new million-dollar cottage plan colony for the Jewish Orphan Asylum, of Cleveland, is contemplated.

Improvements to the amount of $60,000 are soon to be made at the Delaware State Hospital at Farnhurst.

Americans in Florence, Italy, have united in a plan to fit up a hospital in the magnificent Villa Camerata.

A new hospital at the Illinois Masonic Home, Sullivan, Ill., erected at a cost of $50,000, was dedicated July 5.

The annual convention of the Illinois State Nurses' Association will be held in Bloomington, October 8, 9 and 10.

St. Catherine's Hospital, Omaha, Neb., contemplates the erection of an addition to meet the demand of more private rooms.

St. Joseph's Hospital, Hamilton, Ontario, will soon begin the erection of additions which are expected to cost $125,000.

The Davidson county (Tenn.) commissioners have appropriated $75,000 for two new wings at the county asylum at Nashville.

St. Anthony's Hospital, Rockford, Ill., has recently opened a new fireproof addition, erected and equipped at a cost of $100,000.

No accommodations for pay patients will be provided in the $250,000 city and county hospital being erected at San Antonio, Tex.

St. Luke's Hospital, Orlando, Fla., is being remodeled and enlarged and the grounds beautified by the planting of shrubs and flowers.

The Kansas branch of the Lady Maccabees of the World are agitating the establishment of a hospital for members of the order in that state.

At a mass meeting of citizens held in Ellis, Kas., recently, the sum of $9,000 was pledged as a start toward the establishment of a hospital.

Miss Lulu Parker, a graduate of the Rochester (N. Y.) Mechanics Institute, has been appointed dietitian at the Buffalo City Hospital, Buffalo, N. Y.

It is reported that the bulk of the $500,000 estate of the late William S. Hancock, of Trenton, N. J., will go ultimately to the Mercer Hospital in Trenton.

Dr. Charles S. Woods has been elected superintendent of the Methodist Episcopal Hospital, Indianapolis, Ind., succeeding Dr. J. McLean Moulder, resigned.

Dr. Charles F. Sanborn, formerly superintendent of the Cincinnati General Hospital, is now at the head of the new

Typho-Serobacterin Mulford

For the Immunization and Treatment of Typhoid Fever

Action **"Rapid, Safe** and **Durable"**

The value of typho-bacterin for immunizing against typhoid fever is established. The results secured in the United States Army prove that it is more efficacious for the prevention of typhoid fever than vaccine virus for the prevention of smallpox.

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Typho-Bacterin is composed of killed typhoid bacilli suspended in physiologic saline solution, and the number of bacteria standardized per c.c.

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Typho-Serobacterin Immunizing Mulford is furnished in packages of **three** aseptic glass syringes, graduated to contain: **First Dose,** 1000 million; **Second Dose,** 2000 million; **Third Dose,** 2000 million sensitized typhoid bacilli.

The usual dose for immunizing is 1000 million killed **sensitized** typhoid bacilli for the first dose, followed by a second and third dose of 2000 million after 2 to 5 day intervals.

Typho-Serobacterin Therapeutic Mulford is supplied in packages of **four** aseptic glass syringes, graduated to contain: **Syringe A,** 250 million; **Syringe B,** 500 million; **Syringe C,** 1000 million; **Syringe D,** 2000 million sensitized typhoid bacilli.

Typho-Serobacterin Mixed Mulford is used for the prophylaxis and treatment of paratyphoid and mixed infection. It is supplied in packages of **three** aseptic glass syringes, graduated as follows:

	First Dose	Second Dose	Third Dose
Bacillus typhosus	1000	2000	2000 million
B. paratyphosus "A"	500	1000	1000 million
B. paratyphosus "B"	500	1000	1000 million

Typho-Serobacterin Mixed is coming into general favor for preventive immunization, as its use affords immunity against the typhoid bacilli and the paratyphoid bacilli, present in about 10 per cent of typhoid cases.

Full literature mailed upon request.

*Major Russell, Journal American Medical Association, August 20, 1910.

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$400,000 Greenpoint Hospital in Brooklyn, N. Y., having been recently selected from a list of 53 applicants who took the required civil service examination.

The Houston Heights Sanitarium, a private institution at Houston, Tex., devoted to the treatment of nervous and mental diseases, was recently destroyed by fire.

A proposition to issue bonds in the sum of $50,000 for the establishment of a county hospital will be submitted to the voters of Delaware County, Iowa, September 9.

A gift of $100,000 from Julius Rosenwald and associates, of Sears, Roebuck & Co., to the Chicago Lying-in Hospital, is announced by the directors of the institution.

The new hospital of the University of Georgia, at Augusta, was dedicated in June. The hospital consists of a group of four buildings, erected at a cost of nearly $500,000.

The Henrietta Hospital, East St. Louis, Ill., has passed into the hands of the Evangelical Deaconess Association of Southern Illinois. Sister Lydia Bushman will be in direct charge.

Dr. Theodore B. Sachs, of the Chicago Tuberculosis Sanitarium at Winfield, Ill., was recently elected president of the National Association for the Study and Prevention of Tuberculosis.

A committee composed of prominent business and professional men of Mansfield, Ohio, is endeavoring to raise $100,000 for the erection in that city of a building for general hospital purposes.

Mrs. Eliza Johnson, superintendent of the Louisville City Hospital training school for nurses, has resigned this position, giving as her reason the necessity of attending to property interests in California.

Miss Ethel Kent, of Perry, Iowa, has recently assumed the superintendency of the new hospital at Norton, Kas., erected by Dr. C. W. Lathrop. Miss Kent is a graduate of the Methodist Hospital in Des Moines.

At the request of the Washington State Federation of Labor the American Federation of Labor is urging the establishment of a hospital at Seattle by the United States public health and marine hospital service.

The new state sanatorium at State Park, near Columbia, S. C., established for the treatment of incipient and moderately advanced tuberculosis, is receiving patients. Dr. Ernest Cooper is the superintendent.

An institution to be known as the Greater New York Sanitarium and to be located in the Borough of Queens has recently been incorporated, with Dr. Chas. K. Belden, of 28 Clinton avenue, Brooklyn, as president.

The buildings of the Salem Hospital, Salem, Ore., have been sold to the Oregon State Hospital at Salem, to supplement the facilities of that institution, and the Salem Hospital Association will erect an entire new plant.

Dr. Henry C. Aldrich, of Minneapolis, was elected president of the American Institute of Homeopathy at the annual convention held in Chicago July 1 and 2. The 1916 meeting of the institute will be held in Baltimore.

Miss Ida May Haight, dietitian at the Polyclinic Hospital for the last year, and formerly connected with hospitals in Pittsburgh, Pa., and Paterson, N. J., has been appointed dietitian at the new Cincinnati General Hospital.

A company styling itself the "New Carlsbad Sanitarium Co." has been organized at Dry Ridge, Ky., and proposes to erect a forty-room sanitarium building. Drs. E. C. Eckler, John Runnaker and A. C. Blaine are among the incorporators.

In an article in a recent number of the Journal of the Missouri State Medical Association, Dr. R. H. Jesse, former president of the Missouri State University, urges the establishment of a state general hospital in connection with the university.

Miss Victoria White, superintendent of the nurses' training school at St. Luke's Hospital, South Bethlehem, was elected president of the Association of Superintendents of Nurses of Eastern Pennsylvania at the annual convention at Scranton.

An addition to the Evans Hospital, Middlesboro, Ky., made necessary by the increasing demands upon the in-

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Books of Interest To Nurses

The Tuberculosis Nurse — Her Functions and Her Qualifications. A handbook for practical workers in the tuberculosis campaign—By Ellen N. La Motte, R. N., graduate of Johns Hopkins Hospital, former nurse-in-chief of the Tuberculosis Division, Health Department of Baltimore. Introduction by Louis Hamman, M. D. **$1.50.**

A Medical Dictionary for Nurses — By Amy Eliz. Pope. **$1.00.** "Unquestionably the best work of its kind that has ever been published."—*British Journal of Nursing.*

Practical Nursing — A Text Book for Nurses. By A. C. Maxwell and A. E. Pope. (Third Edition.) **$2.00.**

A Text-Book of Anatomy and Physiology for Nurses — By A. E. Pope and Thurza A. Pope. **$1.75.**

Essentials of Dietetics in Health and Disease — By A. E. Pope. **$1.00.**

A Text-Book of Materia Medica for Nurses — By L. L. Dock. (Fourth Edition.) Revised and enlarged. **$1.50.**

A Quiz Book of Nursing for Teachers and Students — By A. E. Pope and T. A. Pope. **$1.75.**

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Corey Hill Hospital, Brookline.
Memorial Hospital of Harvard College, Cambridge.
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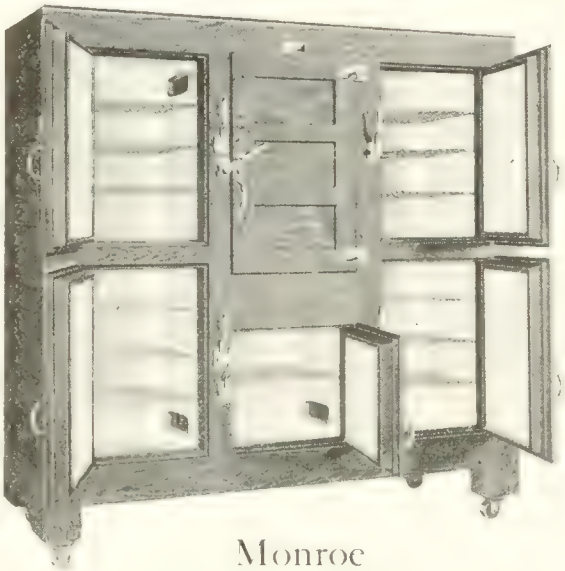

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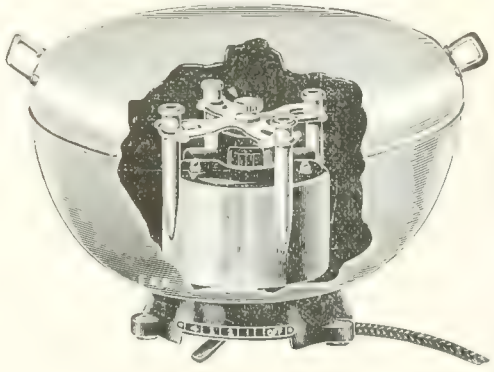

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stitution, will be erected this summer. The Evans Hospital draws a large patronage from the coal fields surrounding Middlesboro.

Two handsome new buildings have recently been added to the University of Texas Medical College group at Galveston, Tex.; namely, a hospital for women and a home for nurses, the two structures representing an expenditure of approximately $215,000.

The Ashtabula General Hospital, Ashtabula, Ohio, has recently received a gift of $10,000 from John H. Burton, superintendent of the Union Dock Company of that city. The money will be used to build an addition as a memorial to Mr. Burton's mother.

The death of Miss Mary Fox McMasters, superintendent of the Good Samaritan Hospital at Lebanon, Pa., occurred at her home in Pittsburgh in the latter part of June. Miss McMasters had been in poor health for several months, suffering from heart trouble.

Benton County, Iowa, is erecting at Vinton a three-story home, 98x65 feet, for the care of poor and mildly insane persons. The building will be of fireproof construction and is expected to cost $35,000. J. G. Rolston, of Waterloo, Iowa, is the architect.

Dr. B. H. Sprague, who has conducted a private hospital in rented quarters at Huron, S. D., for several years, is erecting a new home for his institution. The building will be a two-story and basement structure, 32x70 feet, of brick and stone construction.

In a short campaign conducted last month for funds for the proposed new Easton Hospital in Easton, Pa., over $175,000 was subscribed. More than forty business firms and individuals subscribed as much as $1,000 each; more than fifty, as much as $500 each.

Miss Margaret Hamilton, formerly of East St. Louis, Ill., is in London, England, in charge of a war hospital. Miss Hamilton was one of the few nurses selected in this country for similar work out of a list of 1,500 who took the required competitive examination.

Miss Martha A. Moritz, formerly assistant superintendent of the Chicago Homeopathic Hospital, is now at the head of the State University Homeopathic Hospital, Iowa City, Ia. Miss Moritz was a member of one of the first American Red Cross units sent to Russia last year.

The three-story addition, 47x82 feet, to be erected this summer at the Eastern Dispensary and Casualty Hospital, Washington, D. C., will be one of three new buildings projected for this institution. Architect Lewis H. Russell, of Washington, is drawing plans for the group.

The Kingsley House Association, of Pittsburgh, Pa., has opened its new convalescent home at Valencia, Pa., erected at a cost of over $100,000. The institution will bear the name Lillian Convalescent Rest for Women. It is in charge of Miss Hilda Eckman, a registered nurse.

Dr. Henry M. Pollock, superintendent of the Norwich State Hospital, Norwich, Conn., since its establishment ten years ago, has tendered his resignation to take effect February 1, 1916, at which time he will become the head of the Massachusetts Homeopathic Hospital in Boston.

A law passed at the last session of the Michigan legislature requiring the University Hospital at Ann Arbor to care for any indigent person in the state upon the direction of a probate court, will necessitate an expenditure of $500,000 to $1,000,000 in improvements at this institution.

Dr. Selma M. Mason, general manager of the Kessler Hospital, Clarksburg, W. Va., has given out the information that construction work will be started at once on a four-story building to supplant the structure now occupied by the Kessler Hospital. The estimated cost is $75,000.

Miss Hilda Newburg, of the Swedish Hospital in Seattle, was elected president; Miss Edith Weller, of Tacoma, vice-president, and Miss Lucy Pringle, of the Minor Private Hospital, Seattle, secretary of the Washington Hospital Superintendents' Association at a recent meeting held in Tacoma.

Seven nurses were recently graduated from the training school of the state hospital for the insane located at Nevada, Mo., having completed two and a half years of training. This is the first class of the kind turned out

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Hospital linen can be dried quickly and economically, and "under cover"—away from contaminating influences, with a

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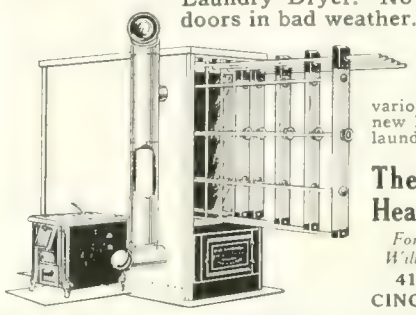

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by any of Missouri's four state hospitals for the mentally sick. The training school of the Nevada institution is in charge of Miss Gertrude W. Moore, R. N.

The new nurses' home of the Germantown Hospital and Dispensary in Philadelphia was opened July 1. The building, which is three stories high and of brick, with limestone trimmings, cost upward of $100,000 and contains sixty-two rooms. A roof garden and swimming pool are features of the structure.

Under a new ordinance in Montreal, Canada, a tax of one cent for the benefit of hospitals and other charitable institutions will hereafter be charged in connection with the purchase of every ticket for a theater, motion picture show, amusement hall, concert hall, circus, playground, race course or skating rink.

A second Harvard unit has left for the war zone. Thirty-four surgeons and seventy-five nurses sailed for England on the American liner "Noordam" on June 22. This unit, under the command of Dr. E. H. Nichols, assistant professor of surgery at Harvard, will be attached to the Royal Army Medical Corps.

Contract has been awarded for a four-story and basement addition to the Hartford Hospital, Hartford, Conn., the construction cost to be $115,000. The new structure will stand directly in front and adjoining the present building. It will be arranged for administration offices and accommodations for private patients.

A three-story and basement addition to the Kelso Sanitarium, Bloomington, Ill., will be erected this summer. The new building will be 40x80 feet, and of fireproof construction. This improvement is understood to be a part of a plan for an entire new sanitarium, two more fireproof buildings to be erected eventually.

The supervisors of Chautauqua County, New York, have accepted a bequest of $150,000 from the late Mrs. Elizabeth M. Newton, of Fredonia, for the erection of a county tuberculosis hospital. The county was required to guarantee the maintenance of the institution, which must offer free care to patients not able to pay.

Willis Sharpe Kilmer, of Binghamton, N. Y., who recently donated $12,000 toward the erection of a maternity ward at the Binghamton City Hospital, now proposes to erect and equip a pathological laboratory for the hospital, and to place in charge, at Mr. Kilmer's expense, for five years, a pathologist of international reputation.

A new lectureship has been established at Mt. Sinai Hospital, New York City. This foundation was created in memory of the late Dr. Edward G. Janeway for the purpose of inviting investigators to present the results of their work to the hospital staff. The lectureship has been established through the generosity of an anonymous donor.

St. Timothy's Hospital, Philadelphia, celebrated in June the twenty-fifth anniversary of its establishment. The hospital was founded by the late John Vaughan and Mary Wagner Merrick. It was first known as "The Memorial Hospital and House of Mercy of St. Timothy's Church, Roxborough," which is, in fact, at this time, the official title.

Under a law passed at the last session of the Oklahoma legislature, railroads operating in Oklahoma must provide hospital care for their employees within the state, and the Midland Valley Railroad has already announced its intention of erecting a hospital in Muskogee. Dr. Sessler Hoss, of Muskogee, has recently been appointed chief surgeon for this road.

Rhode Island has a new law providing special care, maintenance and education for the blind of the state from the day they are blinded. The State Board of Education is empowered to contract with any institution having or furnishing facilities for such care, maintenance and education in Rhode Island or any other state at a price not to exceed $1.00 a day.

The entire medical staff of the South Carolina State Hospital for Insane, at Columbia, with the exception of the senior physician, was superseded July 1 by physicians not previously connected with the institution. A new medical chief will be appointed later. Dr. D. C. Sandy, formerly on the medical staff of one of New York's state hospitals, is the new clinical director. The other physicians appointed are from points in South Carolina. Dr.

Dust Is an Abomination

Never more so than in a hospital. Street dust is full of impurities—laden with infection and disease. At the very least it annoys and disturbs your patients—it soils curtains, hangings, linen and uniforms.

Windows won't keep out dust, however tightly they are closed. It penetrates the cracks that always exist around and between the sashes, and you are powerless to check the draughts which come from the same source.

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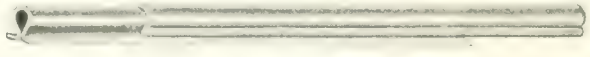
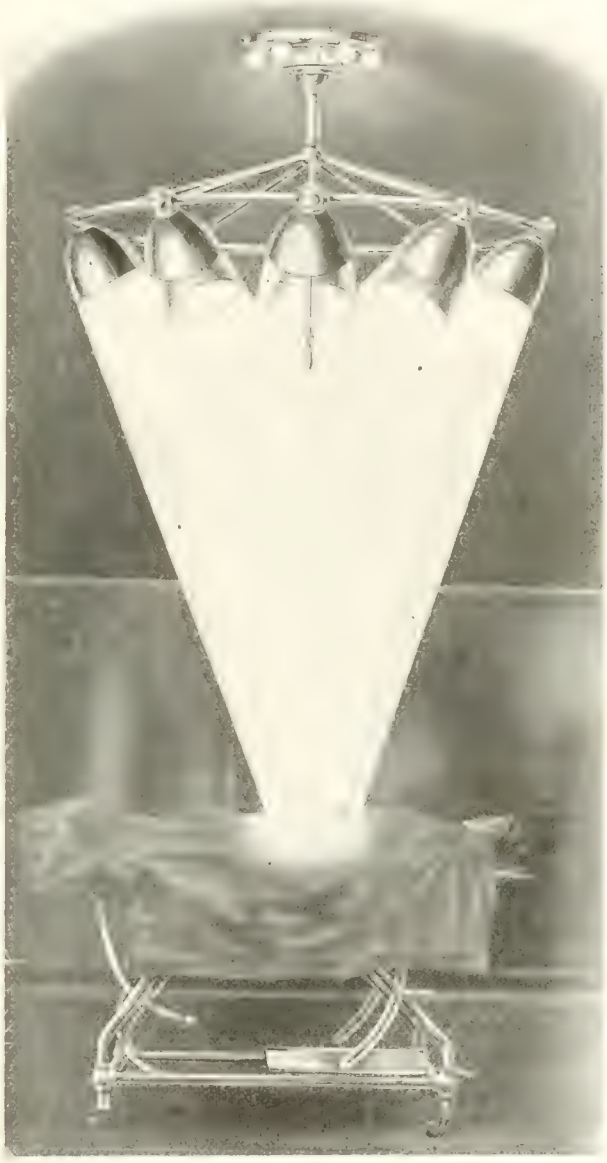


Tight, because it's shaped right 4.

THE BARTLETT
No-Shado Operating Room Lite



All shadows are eliminated from the field of operation

A lighting fixture for the Operating Room that positively eliminates all shadows from the operating field.

The light rays from this fixture, meeting at an angle of 45 degrees on the operating field, make possible the visual examination of deep wounds.

The Bartlett No-Shado Lite has proven a revelation in operating room illumination.

A few of the many hospitals whose surgeons are finding the Lite a source of great convenience are:

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Washington Boulevard Hospital, Chicago, Ill.

Robert Packer Hospital, Sayre, Pa.

West Suburban Hospital, Oak Park, Ill.

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Manufacturers of

"THE WHITE LINE" Hospital Furniture and Sterilizing Apparatus

MADISON, WISCONSIN, U. S. A.

James L. Thompson, first assistant physician, will be retained in another capacity having no connection with the medical staff.

Because of a provision in the laws of Pennsylvania making invalid a bequest to a hospital drawn within thirty days of the testator's death, the Homeopathic Hospital, of Buffalo, N. Y., will not be able to claim a bequest of $10,000 from the late Dr. Edwin Gregg, who lived and died in Pennsylvania.

In the military hospital at Brighthelmstone, where England is caring for her wounded Indian soldiers, or "Ghoorkas," and catering to their religious creeds and customs, the nursing is done almost entirely by men. No woman may touch a patient, and the few sisters on the staff may not be present in the wards during meals, lest their shadows fall across the food and defile it.

William Bradford Buck, Ph. D., for the last eight years in charge of the Seibert Institute for Children, at Philadelphia, has accepted a temporary appointment as superintendent of the New York City Children's Hospital and Schools, on Randall's Island. Dr. Buck succeeds Mrs. Mary C. Dunphy, who had been in the employ of the Department of Charities for forty-nine years.

The Denison Hospital, Denison, Iowa, has been purchased by Drs. Carl E. Conn and George E. Hartley, who conduct a private hospital at Battle Creek, Iowa. The Battle Creek institution will be continued until extensive improvements, which the new owners propose to make, have been completed at Denison. Dr. A. H. Rosburg has been placed in charge of the Denison Hospital temporarily.

A hospital unit for field service behind the allies' lines in France is being organized in St. Louis. Dr. W. T. Coughlin, a member of the faculty of the St. Louis University Medical School, is active in the undertaking. According to the plans outlined by Dr. Coughlin the unit will consist of thirty-five physicians and surgeons and seventy-five nurses and will become a part of the medical corps of the British army.

Two new ward buildings, an auditorium, laundry, refrigeration plant, and a number of farm buildings are soon to be erected at the Northern State Hospital at Sedro-Wooley, Wash., $196,000 having been appropriated for the purpose at the last session of the Washington legislature. New buildings requiring an expenditure of $250,000 are to be erected at the Washington State Institution for Feeble-minded at Medical Lake.

In connection with the European war relief activities of the American Red Cross, Miss Winifred Holt, of the New York Association for the Blind, has gone to France to assist in caring for those who have been blinded in the war. The American Red Cross has contributed $2,000 for this special work in France and a like amount for assisting the German Red Cross in caring for Germans who have lost their sight as the result of wounds.

E. E. Murphy, of Leavenworth, Kas., who is a director of the Modern Woodmen of America, and who will supervise the erection of the $50,000 general hospital to be built in connection with the tuberculosis sanitarium of the order at Colorado Springs, is authority for the statement that during the five and one-half years the sanitarium has been in operation 1,247 men have been cured or helped so that they have been able to earn two million dollars.

The Burke Foundation in June opened a branch near White Plains, N. Y., for the convalescence of colored patients, along the lines that are proving so successful in the main institution. This will be under the management of the National League on Urban Conditions among Negroes, through whom application is to be made, and will fill a long-felt want. Greater New York has a colored population of about 120,000, with practically no provision heretofore for their convalescent care.

The project to combine the Presbyterian Hospital, of New York City, and the medical school of Columbia University with a view of creating a great medical center, involves the expenditure of $10,000,000 for site, additional buildings and equipment. Included in the undertaking as it is now planned will be the erection of a 650-bed hospital, seventeen stories high, by the Presbyterian institution, at a construction cost of $3,250,000, and the rebuilding of the Vanderbilt Clinic, together with the erection of a medical school by Columbia at a combined cost of $2,-

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All are puffed by Prof. Anderson's process — by millions of steam explosions. The grains are sealed in guns, then rolled for an hour in 550 degrees of heat. The moisture in each food cell turns to steam. When the guns are shot that steam explodes, and every food granule is blasted to pieces.

No other cooking process so breaks up the food cells. And most folks think that no other process makes such delightful cereal foods.

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Except in Extreme West

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WEIGHT, in carrying case, 9¼ lbs., carrying case being less than one-half the size of a regular microscope case. The folding base is the only collapsible feature. The side fine adjustment (two heads) is of the lever type.

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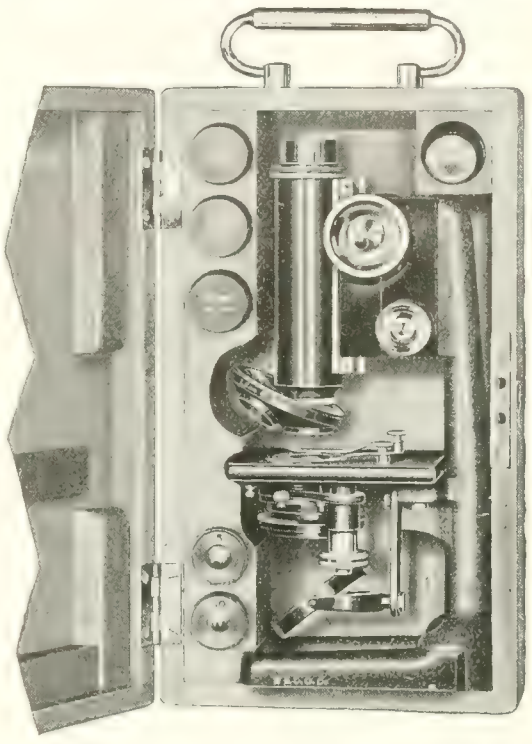

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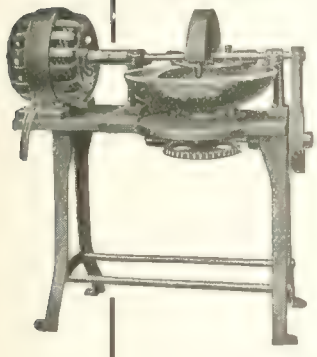

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SPECIAL OFFER—We will ship this machine on 30 days' trial, and pay freight charges both ways if not acceptable.

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300,000, plus $100,000 for new equipment. The site for the new structures, on which an option has already been taken, consists of a nine-acre tract at Broadway and 168th street, valued at $2,000,000.

Miss Carrie P. Vanderwater, formerly superintendent of nurses at Grace Hospital, Detroit, Mich., for several years, has been appointed superintendent of the Homeopathic Hospital in Providence, R. I.

Rev. Abram S. Kavanagh has resigned the superintendency of the Methodist Hospital, Brooklyn, N. Y., to return to the ministry, and Dr. James E. Holmes has been elected to succeed him. The change, however, will not take place until April, 1916.

Ella Sigourney Murdock, a graduate of Bellevue Hospital, and for twenty-three years matron and superintendent of nurses of the Hospital for Ruptured and Crippled, New York City, died Friday, July 16th, at Yonkers, N. Y. Interment took place at Wellsville, Ohio.

The People's Nursing and Hospital Aid Association is the name of an organization at Rockford, Ill., charging an entrance fee of fifty cents, dues of $2.06 a year for adults and $1.04 a year for persons under twenty, and furnishing sick members a $15.00 room at a hospital, a trained nurse at the home in the case of contagious diseases and a visiting nurse for other cases not requiring hospital care. The association also pays for the ambulance and operating room when needed.

By filing an application with the secretary of state for incorporation papers, the directors of St. Lawrence Hospital, 163d street and Edgecomb avenue, New York City, have taken the first step toward the erection of a larger home for this institution. According to the plans given out, the proposed new hospital will eventually consist of a group of buildings representing an expenditure of $1,000,000. It is expected that the construction of the first unit will be started soon.

The next annual convention of the Iowa State Association of Registered Nurses will be held in Burlington. At the recent meeting in Iowa City officers for the ensuing year were elected as follows: President, Ann J. Jones, Des Moines; first vice-president, Mrs. J. J. Seerley, Burlington; second vice-president, Helen Peterson, Sioux City; recording secretary, Gyda Bates, Cedar Rapids; corresponding secretary, Ella McDannel, Cedar Rapids; treasurer, Blanche Bowker, Ottumwa; auditor, Katherine McCarthy, Dubuque.

A committee recently appointed to investigate conditions at the New York City Children's Hospitals and Schools on Randall's Island urges the immediate expenditure of over $500,000 for new buildings and equipment for these institutions. The improvements recommended include the erection of a modern 200-bed hospital for helpless children, estimated cost $200,000; a unit cottage for 100 children, with facilities both for living and education, estimated cost $50,000; living quarters for attendants, to cost $100,000; the repairing of an old building, including the installation of electric lights and modern plumbing, at a cost of $150,000; and the expenditure of $50,000 for equipment in the way of sewing machines, toys, educational aids and playground apparatus. Both Mayor Mitchell and City Controller Prendergast are in favor of appropriating funds to carry out the recommendation of the committee, and it is believed that action will be taken promptly.

A hundred insane patients of the city sanitarium in St. Louis recently enjoyed a diversion in the way of a dance at a private hall many blocks from the part of the city in which the sanitarium is located. Mrs. C. C. Hardcastle, who gives weekly instruction in dancing at the sanitarium, suggested that the routine of the patients' lives would be pleasantly broken if they were allowed to dance elsewhere some afternoon. Superintendent George A. Johns agreed. A hall in a fashionable West End neighborhood was rented for the occasion, the street railway company donated two special cars, and Mrs. Hardcastle bought ten gallons of ice cream for refreshments and asked a dozen of her regular pupils to assist in receiving the guests. The patients waltzed, sang popular songs, fox-trotted, tangoed, cantered, and danced the old-fashioned quadrille. Although some stood aside bashfully at first, as might be expected, all finally joined in the festivities and seemed to enjoy themselves thoroughly.

Worry *versus* Enthusiasm

You cannot expect a tired nurse to be enthusiastic about her work.

Relieve her of all possible physical work and enthusiasm will replace worry.

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can carry things up and down between the different floors better and quicker than nurses.

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Can open up to five or six inches at center, while still closed top and bottom.
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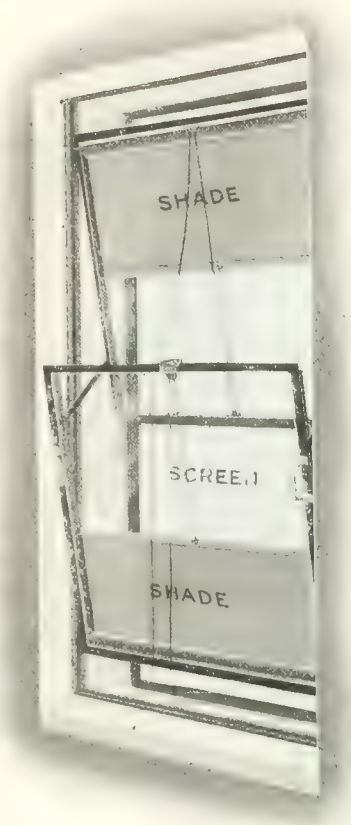
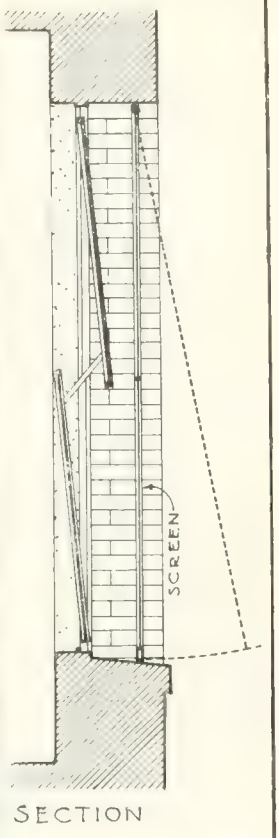


INTERIOR VIEW



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Under proper headings this column will present advertisements of Positions Wanted, Help Wanted, Articles for Sale, etc.

When requested, replies will be received at the business office of THE MODERN HOSPITAL, Metropolitan Building, St. Louis, and will be forwarded promptly to the advertiser.

The charge is $1.00 for 30 words or less, and 3 cents for each additional word. For the convenience of both advertisers and publishers, classified advertisements are payable in advance.

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POSITIONS—Superintendents of hospitals, superintendents of nurses, etc., furnished hospitals anywhere in the world. No charge to Hospital Boards for this service. If you want nurses capable of developing your institution, why not let us put you in touch with the very superintendent for whom you are looking? We have the most competent hospital superintendents registered with us for advanced positions. If you need an organizer or teacher promptly, write us now. Aznoe's Central Registry for Nurses, 3544 South Grand Boulevard, Chicago, Ill.

POSITION—As superintendent. A registered graduate nurse with good experience and special college preparation for hospital administration, wishes superintendency of larger hospital than present position. Highest credentials. Address "College," THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As office nurse in a physician's office, by a graduate registered nurse having excellent hospital experience. Competent anesthetist. Philadelphia or vicinity preferred. Address D. A., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As superintendent of 100-bed hospital or larger. Have had excellent experience as executive. Highest recommendations. Apply X. Y. Z., THE MODERN HOSPITAL, Tower Building, Chicago.

POSITION—As superintendent of general hospital of not more than 200 beds, where high-class work and executive ability are required. Have had wide experience in executive positions. Only desirable position considered. Address E. H., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As superintendent of nurses or assistant. Am graduate of large Eastern hospital—an excellent teacher and experienced. Salary must be liberal. Address R. N. M., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

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POSITION—As superintendent of a 100-bed hospital, or assistant superintendency of a larger institution. East preferred. Have had excellent executive training, besides R. N. degree. Highest recommendations. Address D. C. L., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—Registered graduate nurse with executive ability desires position as head surgical nurse or night superintendent in general hospital. Thoroughly capable. Excellent credentials. Address M. W., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—Former superintendent of a Southern hospital desires to again take up hospital work either as superintendent or assistant superintendent of modern, general institution. Good executive, energetic, graduate of A1 school. Address M. D., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As head worker in Social Service Department of hospital. Woman physician with executive ability wishes position as head worker in Social Service Department of hospital. Graduate of Social Service Institute and Woman's Medical College, Pennsylvania. Fifteen years' experience. Dependable reference. Will the superintendents of hospitals direct this advertisement to the attention of the President of the Social Service Committee of their institutions? Address Dr. R., 628 West York street, Philadelphia, Pa.

POSITION—A medical superintendent, who can show actual record of having reduced the operating expense of a fifty-bed division of a sanatorium over eighteen percent and who manages the division on seven to ten dollars a week per patient, wants an opportunity to demonstrate his ability in a larger field. Has medical degree from P. & S., New York City. Address E. R. B., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As superintendent of general hospital of from 75 to 150 beds by registered nurse with ten years' experience. Free to take position at any time. Address S. S., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As housekeeper. Highest recommendations and excellent experience. Prefer hospital or Nurses' Home. Address R. T., THE MODERN HOSPITAL, Tower Building, Chicago.

POSITION—As superintendent of hospital by graduate nurse. Registered in New York. At present employed. Can give best of references from hospital where have been superintendent for the past four years. Also from former position of eight years. Address P. H. M., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As superintendent of training school. Registered graduate and post-graduate of two large [illegible] experience. Address H. H., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—By a graduate registered nurse as operating room supervisor, or assistant to surgeon. Also experienced as anesthetist. Best of credentials furnished. Address A. M. T., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—As superintendent of small general hospital by registered graduate nurse of good hospital experience. Has had special course in hospital management. Address Champlain, THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

Continued on page 48

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CLASSIFIED ADVERTISING.

Continued from page 46

POSITIONS WANTED—Continued.

POSITION—To travel. A graduate registered nurse of excellent standing would like to travel with and care for a chronic semi-invalid, not mentally afflicted, after September first. Excellent references. A good letter writer and has executive ability. Address M. A. C., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITION—By experienced young man, as manager or steward or combined position of a general hospital located somewhere in the West. At present employed. Have excellent reasons for making change. Best of credentials. Address P. J. R., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

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MISS BAYLIES' FIFTH AVENUE DIRECTORY FOR NURSES, 8 East 37th Street, New York, N. Y. Open day and night. Hospitals and institutions throughout the United States supplied with superintendents, assistant superintendents, operating room nurses, supervising and head nurses, dietitians, and housekeepers. Only graduates with first-class credentials from recognized training schools are considered.

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SALESMEN—Salesmen wanted who are willing to take out side line, selling to hospitals and institutions on commission and salary basis—good opportunity. Communicate with Miss Grace Gleichenhaus, 154 Henry street, New York City.

DIETITIAN AND HOUSEKEEPER—Experienced dietitian and housekeeper wanted for 250-bed hospital. State fully in first letter, references and salary expected. The Miami Valley Hospital, Dayton, Ohio.

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TRAINING SCHOOL TEACHER—Large Southern hospital, with 100 nurses and new "Home," wants all-time instructress. Write to A. B. Tipping, Superintendent, Touro Infirmary, New Orleans, La.

OBSTETRICAL NURSE—Head obstetrical nurse, capable of taking charge of a department of fifty beds. Address Superintendent of Nurses, Minneapolis City Hospital, Minneapolis, Minn.

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COMPLETE STERILIZING APPARATUS—For sale cheap, complete sterilizing apparatus, double wash basin, and complete second-hand laundry apparatus. Address X. L., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

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MISCELLANEOUS.

WHY YOU SHOULD BUY A FISH ROTARY OVEN—Because it bakes the finest goods; has great capacity; bakes all kinds of goods, saves labor, fuel, space, time and repairs. It is a continuous baker and can be used night and day. Also it is reasonable in price. Let us tell you the experience of others who are using it. For illustration see our advertisement on page 23 of this journal. A. J. Fish & Company, Walworth, Wis.

GENERAL SERVICE—Physicians, surgeons, and nurses furnished free for hospitals or assistants; practices of physicians, surgeons, dentists, and also of veterinarians handled and furnished in all the states; drug stores for sale; medical appliances, books, etc. (second-hand), sold and furnished; positions furnished in all the states. F. V. Kneist, Omaha, Neb.

LANE CANVAS BASKETS AND TRUCKS—A few styles of these sanitary baskets and trucks are illustrated and described on page 124 of this issue of the journal. Complete catalogue and Price List No. 52 will be mailed on request by the manufacturers, W. T. Lane & Bro., Poughkeepsie, N. Y.

TEST YOUR STERILIZATION FREQUENTLY—The best apparatus and routine fail at unexpected times. The Sterilizer Control is the simplest and most exact scientific test there is. Get a box of Sterilizer Controls and have them convenient for quick tests. 100 for $5.00. A. W. Diack, 47 Larned street, Detroit, Mich.

Continued on page 50

PRESBYTERIAN HOSPITAL, N. S. PITTSBURGH
T. E. BILLQUIST, ARCHITECT
A. C. KAPP, PAINTING CONTRACTOR

Satinette

WHITE ENAMEL

The Glossy, Porcelain-Like Enamel used in every place where sanitary conditions must prevail—kitchens, operating rooms, laundries, wards, etc.

Is aseptic and durable, and stands all the hard knocks of everyday hospital life. It is easy to apply, and gives entire satisfaction at all times. Backed by the largest varnish works in the world.

STANDARD VARNISH WORKS

NEW YORK CHICAGO SAN FRANCISCO
LONDON BERLIN MELBOURNE
INTERNATIONAL VARNISH COMPANY, Ltd.
TORONTO, CANADA

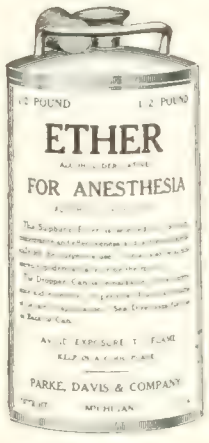
FAVORITE FOR OVER HALF A CENTURY

You know it is an ALLENDALE when you see this label

Write now to Dept. 4, Allendale, Providence, R. I., U. S. A.

Our New Ether Container

In addition to the dropper-tube which has been a notable feature of our half-pound and quarter-pound ether packages, we now provide the ordinary outlet, to be used with a cork. This outlet, as the can comes to the anesthetist, is tinned over—sealed. Cut away the top, if you wish, and insert the cork which is supplied with the package.



Two sizes
half-pound and quarter-pound.

Most physicians using our ether for anesthesia prefer the dropper-tube, which is cut in the center when ready for use, the severed parts being bent in opposite directions, air entering one tube, the ether flowing from the other. Some anesthetists, however, for reasons of their own, desire to employ the old method. Whichever way is your way, the new can meets your need.

Our new ether package leaves nothing to be desired. "The purest ether; the best container."

FOUR PACKAGES:

Half-pound and quarter-pound cans.—With both dropper-tube and Grommet nozzle.
Pound cans.—With Grommet nozzle only.
Hospital Package.—A special 5-pound can.

◆ ◆ ◆

Use PARKE, DAVIS & CO.'S PURE ETHER and reduce to a minimum the discomforts of your patients from etherization.

Home Offices and Laboratories,
Detroit, Michigan.

Parke, Davis & Co.

CLASSIFIED ADVERTISING.

Continued from page 48

MISCELLANEOUS—Continued

MILWAUKEE COUNTY TUBERCULOSIS SANATORIUM—Among the equipment for which contracts are just awarded are 1,000 grade felt mattresses, also one hundred of the See See Inner Spring Mattresses, which are constructed with the idea of being especially appreciated by chronic invalids. Your institution should be on the list of hospitals which we supply. See our announcement on page 63 of this number. Cream City Bedding Company, 3200 Fond du Lac avenue, Milwaukee, Wis.

TEMPTING DAINTIES—Book of Recipes. Sparkling gelatine can be so temptingly used in connection with many dishes that appeal to the appetite of the ill and convalescent. We want to send you our book of recipes telling how to combine this refreshing, nutritious and appetizing dainty with other food substances, such as chicken, meats, fruits, salads, etc., to tempt the palate of your patients. Cut the coupon from our advertisement on page 45 of this number and secure sample package and book of recipes. Chas. B. Knox Company, 608 Knox avenue, Johnstown, N. Y.

DIPLOMAS—One or a thousand. Illustrated circular mailed on request. Ames & Rollinson, 203 Broadway, New York, N. Y.

THE SCHOOL OF MEDICAL GYMNASTICS AND MASSAGE offers a practical and theoretical course in Swedish Movements, Massage, etc. Diploma. Patients secured. For further information apply School of Medical Gymnastics and Massage, 61 East 86th street, New York, N. Y.

AGENCY FOR THE COOLIDGE TUBE—We have recently been appointed western sales agents for the Coolidge X-Ray Tube, the invention of Dr. W. D. Coolidge, assistant director of the Research Laboratory, General Electric Company, Schenectady, N. Y. Its use permits of results not obtainable with any other. Another important factor is the increased work which can be done with small generators through the use of this tube. Full information furnished on request. Scheidel-Western X-Ray Coil Company, 737-739 West Van Buren street, Chicago.

ARE THE LIGHTING FIXTURES IN YOUR HOSPITAL UP TO DATE? The Mefcolite semi-indirect fixtures are sanitary and efficient for hospital use. They are neat in appearance and very easily cleaned. See illustration and description on page 10 of this number, and write for particulars regarding various styles and uses. H. G. McFaddin & Company, 38A Warren Street, New York City.

RELIABLE VACUUM HEATING EQUIPMENT the ideal one for hospitals. Has been installed successfully in many institutions for the care of the sick. Some points of advantage are told in our advertisement on page 46 of this issue. We would like to send you our booklet "L," which will be furnished on request. The Bishop-Babcock-Becker Company, Cleveland, Ohio.

Continued on page 52

Economize on your Linen

Baker Linens are constructed especially to withstand hard and constant use in Hospitals and other institutions, and are sold at prices that are the lowest consistent with quality necessary for service.

We offer special inducements to hospitals on the following:

Table Linen, Sheets, Pillow Cases, Blankets, Comfortables, Spreads, Crashes, Towels, Toweling, Etc.

Leading hospitals throughout the country are using with universal satisfaction our Extra Heavy Round Thread and Sampson Institution Sheets and Pillow Cases.

Samples and quotations cheerfully furnished

H. W. BAKER LINEN CO.

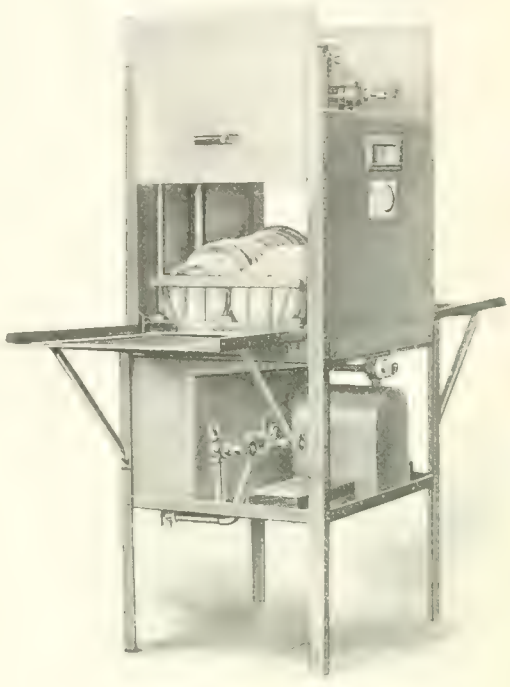
Dept. H, 41 Worth Street, New York City

752 S. Los Angeles St., Los Angeles, Cal.

CRESCENT DISH WASHER

Noiseless — Rapid — Thorough

Easy to Operate



HOSPITAL MODEL A

Dishes are washed in torrents of soapsuds — rinsed and sterilized in clean, boiling water and automatically dried. All without being touched by hand.

Quickly pays for itself by reason of the saving of dishes, the elimination of dish towels, and the saving of time and labor.

The Crescent has been on the market for over twenty years. It is made in several sizes, and is used in leading hospitals and other institutions.

Send for illustrated folder. Learn all about it without obligation

BROMLEY-MERSELES MFG. CO.

INCORPORATED

CHICAGO — 215 West Superior Street

NEW YORK — 1328 Broadway

Distinguished Endorsement

Such pure food authorities as Dr. Wiley, Prof. Allyn, Dr. Goudiss and Alfred W. McCann have analyzed and endorsed

KNOX

SPARKLING GELATINE

(Granulated)

It is made of the highest-grade and most carefully-selected ingredients. At no stage in its manufacture is it touched by hands. Knox Gelatine has gained a reputation for absolute dependability.

The value of gelatine as a proteid and albumin "sparer" has been frequently commented upon, and as a vehicle for other food substances it has an important place in the dietary of the sick and convalescing patient.

As a tissue builder during the period of post-hospital treatment, Knox Gelatine will always give dependable service.

Cream Chicken Salad

(Individual)

1½ tablespoonfuls heavy cream.
1/8 teaspoonful **Knox** Sparkling Gelatine
¾ teaspoonful lemon juice
A few grains salt. 1 teaspoonful boiling water.
3 tablespoonfuls cold boiled fowl, cut in small cubes.
¼ tablespoonful finely chopped parsley.

Beat cream until stiff and add gelatine, soaked in lemon juice three minutes and dissolved in boiling water. When mixture begins to thicken add fowl (using preferably the white meat), mixed with parsley and salt. Turn into an individual mold, first dipped in cold water, and chill. Remove from mold to crisp lettuce leaves and garnish with a sprig of parsley.

Knox Gelatine is nothing but plain, granulated gelatine. It contains no sugar (most ready-prepared "jellies" average 85% and 95% sugar. See Wiley's "1001 Tests.") Sweetening, flavor or other ingredients are added as desired, thus the hospital physician, superintendent and dietitian can be certain of the quality and composition of any dish made with Knox Plain Gelatine.

FREE — Recipe Book and Sample

Chas. B. Knox Company, Inc.,
608 Knox Avenue, Johnstown, N. Y.

Please send me, FREE, a full-size package of Knox Gelatine and a Recipe Book of Desserts, Jellies, Puddings, Salads, etc.

Name _____

Address _____

CLASSIFIED ADVERTISING.

Continued from page 50

MISCELLANEOUS—Continued.

X-RAY TUBES—Our new Cathode Clover Leaf Tubes are practically indestructible. We guarantee them not to crack at the cathode neck, and that the focus is absolutely steady. Green & Bauer, Inc., 30 East Randolph street, Chicago, and 234 Pearl street, Hartford, Conn.

GAUZE ABSORBENT COTTON—Write for samples and prices of our "Curity" products before placing your next order for gauze and absorbent cotton. Lewis Manufacturing Company, Walpole, Mass.

LAUNDRY MACHINERY—We make a specialty of laundry machinery and appliances for hospital use. Every modern hospital should use our sterilizing washer. Write for full description and prices to Empire Laundry Machinery Company, 73-75 Pearl street, Boston, Mass.

X-RAY MANUAL FREE.—This authoritative little book has been found to be of much value to hospital officials and to the medical profession generally. A copy will be sent complimentary on request. Address G. Cramer Dry Plate Co., St. Louis, Mo.

SAFETY FROM FIRE—The Kirker-Bender Fire Escape makes quick escape possible in case of fire. Built anywhere in the United States. Write for full description. Dow Wire & Iron Works, Louisville, Ky.

HOSPITAL SIGNALS—Whatever the style or size of your institution, we can equip it with an efficient and reliable signaling system. We have made a study of hospital requirements. Write for catalogue. The Bryant Electric Company, Bridgeport, Conn., or 323 West Jackson Boulevard, Chicago.

FOOD SPECIALTY OF DIETETIC VALUE—The milk of green corn, extracted from the kernel and boiled down, makes Kornlet, especially useful in feeding invalids, the young, the aged, the convalescent. Kornlet Recipe Book furnished free on request. The Haserot Canneries Company, Cleveland, Ohio.

YOUR FLOOR PROBLEMS SOLVED if you have "Hygenia" Sanitary Composition Floors. Easy of tread as linoleum and will last a lifetime. Render your hospital sanitary, fire, water, dust, germ and vermin-proof. Estimates and samples furnished on request. National Hygienic Floor Company, 1911 Pine street, St. Louis, Mo.

QUAKER OATS AS RELATED TO GOOD HEALTH—Quaker Oats are shown to possess, in addition to the ordinary nutritive value of oats, a special excellence due to care in picking out only big, plump grains. The Puffed grains have three qualities which will recommend them in prescribing diets for delicate stomachs. They are made of whole grains with none of the vitamines removed; they are cooked and toasted through and through and rendered easily digestible, and they have a taste that will tempt even the most reluctant appetite. Sample package mailed on request. The Quaker Oats Company, Chicago.

Continued on page 54

To dextrinize thoroughly the starch cells in oatmeal, thorough cooking is essential. To this end we steam-cook H-O in sealed containers for over two hours. The danger of under cooking is thus done away with—a point of special interest to medical men on hospital staffs.

H-O

THE *ONLY* STEAM-COOKED

Oatmeal

The H-O Company, Buffalo, N.Y.
Makers of H-O, Force, *and* Presto.

Dr. Kellogg's Book on Massage

Is especially adapted for Hospitals and Sanitariums because it is the outgrowth of the author's vast experience at the Battle Creek Sanitarium. It was written after Dr. John Harvey Kellogg had observed, for over 35 years, the employment of Massage at this institution—where this therapeutic measure has reached its highest development. The technic and actual procedures as perfected at the

Battle Creek Sanitarium

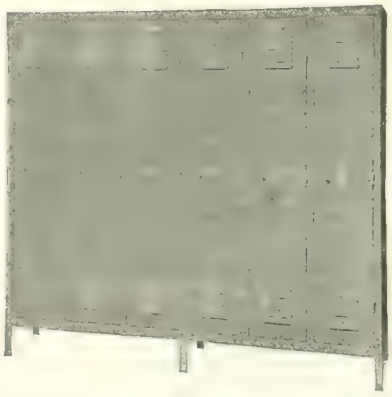
are embodied in the Sixth Revised Edition of "The Art of Massage." This is acknowledged the most advanced and exhaustive work on the subject, because—it has kept pace with the material advances in this field. New procedures—especially in abdominal, colonic and pelvic Massage—have been introduced. All doubtful and inefficient procedures have been discarded.

Dr. Kellogg's book is a practical guide to the institutional use of Massage. Each procedure is so indexed that you can locate it **instantly.** And—the illustrations enable you to grasp the technic at a glance. You get all the indications and the contra-indications—together with the specific effects of the various external applications. Besides—you get a summary of the methods employed by the foremost Swedish, German, French and English manipulators.

296 pages—59 full page plates—over 150 photographic illustrations—11 colored anatomical plates (Bock). Bound in cloth, $2.50, **fully postpaid.** You need have no hesitancy in ordering, because if you feel that this book does not belong in your medical library—you may return it for prompt refund. Address your order and remittance to

GOOD HEALTH PUBLISHING CO.
6808 W. Main Street **Battle Creek, Mich.**

Descriptive literature on request



A Hospital Problem Solved: *The Storage of Clothing*

Our lockers are sanitary—vermin, rodent and thief-proof—resist fire—are strongly yet simply constructed of heavy gauge steel for hard usage—and save valuable space.

BERGER'S STEEL LOCKERS

As the largest manufacturers of steel-formed products in the world, we have unsurpassed facilities for giving you the utmost in locker quality and satisfaction.

Send for Special Catalog Y M H

The Berger Mfg. Co., Canton, O.

Nearest Branch for Best Service:

Boston Chicago Minneapolis New York
Philadelphia San Francisco St Louis

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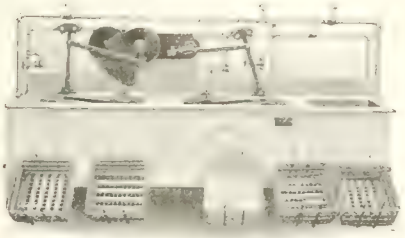
Protect Your Patients from Germs



Three-Tank Electric Dishwasher. BEJ Two wash and one rinse tanks. BEJ One wash and two rinse tanks.

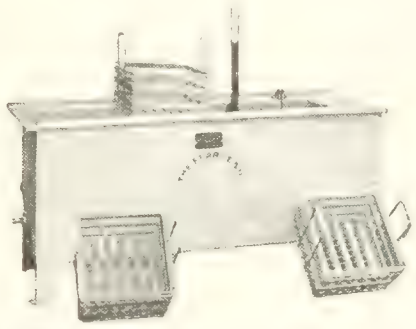
Designed especially for hospital and sanatoriums where an extra rinse or wash tank is desired for sterilization or other purposes.

LEADING PHYSICIANS agree that an incalculable percent of people contract disease from germs passed on to them by means of dishes improperly washed.

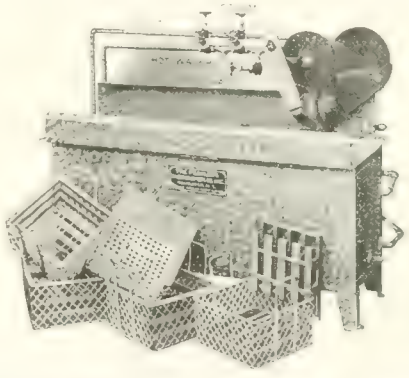
The Fearless Electric Dishwasher

frees you from responsibility for menace to the health of persons who eat off your dishes. It not only removes the most obstinate food particles, but eliminates the most persistent germs.

The present Fearless Dishwashing System is the outcome of untiring study and experience in the manufacture of dishwashing machinery. The result is a design correct in principle, gained from experience with the manufacture, and constant use by customers, of over 4,000 of our dishwashers.



Fearless Hand-Power Dishwasher. Easily operated, easily lifted, easy to clean, easy to keep in repair. Just the thing for places where electricity or other power is not available.



BV Fearless Rapid Dishwasher. A two-tank, variable speed machine operated by electric power. Approximately 75 barrels of water are forced through the basket of dishes every minute.

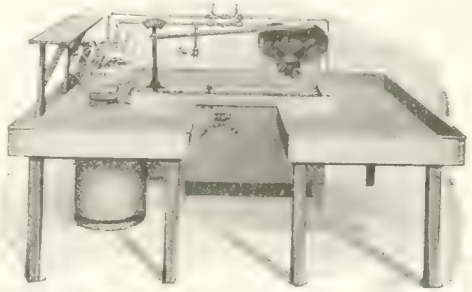
Fearless Dishwashing Machines

are made with the least possible number of parts, with resultant simplicity impossible in any other dishwasher. Thus they can be operated by anybody without the services of a skilled mechanic. Designed to suit space of any size and shape. Famous for safety and durability. Save help and space.

An Important Feature of the **Fearless** is the ease with which the tanks may be cleaned. There are no hidden passages or inaccessible places.

Power Machines are easy running and are operated at remarkably low cost.

Breakage and nickage of dishes washed in the Fearless is practically eliminated. Our customers tell us that after installing a Fearless Dishwasher their bills for breakage and nickage fell off nearly 100 percent.



No. 1 BE Fearless Dishwasher, equipped with tables and a scrap block—admirably adapted to limited floor space.

Our complete line of dishwashers, electric and hand power, are fully illustrated and described in our 1915 catalog. Write for a copy. We send it FREE.

THE FEARLESS DISHWASHER CO., Inc., 132 Colvin St., Rochester, N. Y.

In Business Thirteen Years

CLASSIFIED ADVERTISING.

Continued from page 52

MISCELLANEOUS—Continued

AN EFFICIENT SYSTEM OF MARKING LINENS AND CLOTHING—Our National Marking Machines are in operation in so many hospitals today because they are money-savers. Write us for our Guarantee of Savings by the use of our machines. National Marking Machine Company, 1062 Gilbert avenue, Cincinnati, Ohio.

HOT WATER SUPPLY FOR THE SMALL HOSPITAL—Hot water at any hour of the day or night, at the turn of the faucet in any room, may be had economically with the Hoffman Heater. The gas is consumed only while the water is running. Send postal for our booklet. The Hoffman Heater Company, Lorain, Ohio.

"INDIAN HEAD" WHITE COTTON FABRIC FOR NURSES' UNIFORMS—Indian Head has all the beauty of linen without its tendency to wrinkle easily. It requires far less care to keep clean, and washes and wears better than most white fabrics. This fabric is now obtainable in ready-made uniforms, each of which bears the label, "Made of Indian Head." Write us for samples. Amory, Browne & Company, Dept. 110, 48 Franklin street, Boston, Mass.

A PURE, DELICIOUS VEGETABLE OIL—Wesson Oil, made from the seed of the cotton plant, is equal to the finest olive oil and costs only a third as much. It is nourishing, digestible, palatable, and economical. A request from the dietitian of your hospital will bring a can of generous size. See the third cover page of this number. Southern Cotton Oil Company, 90 West Broadway, New York, N. Y.

TEMPT THE APPETITE OF THE PATIENTS in your institution by serving nourishing foods in appetizing and palatable forms. When gelatine is used to carry fruits, fruit juices, broths, meats and cream, it makes the dish so tempting and dainty that the patient will relish every mouthful. We will send you a trial package of Chalmers' Gelatine upon receipt of signed coupon from our announcement on page 30 of this journal. James Chalmers' Sons, Williamsville, N. Y.

SEMDAC LIQUID GLOSS—**The use of this preparation collects and removes the dust and its germs instead of scattering them. Can be used on all polished surfaces. Saves scrubbing, time, and labor. Prepared by the Standard Oil Company.**

FREE SAMPLE PACKAGE OF KNOX SPARKLING GELATINE AND BOOK OF RECIPES—Served plain or combined with other food substances, Knox Gelatine forms appetizing and nutritious desserts, salads, etc., which will often excite the appetite when plain foods will fail. Cut the coupon from our advertisement on page 45 of this journal and secure a sample package and book of recipes. Chas. B. Knox Company, 608 Knox avenue, Johnstown, N. Y.

VALUABLE BOOK FREE—"The Art of Corsetry From a Medical Standpoint" is the title of an interesting book that is of value to hospital superintendents, physicians, and nurses. Sent free on request. The H. W. Gossard Company, 1204 Lakeview Building, Chicago.

This label guarantees quality

Established 1848. Times change, but "Utica" remains a Standard

UTICA Sheets and Pillow Cases

are especially adapted to the needs of Hospitals, Sanatoriums, and other institutions because the Utica fabric is woven of only selected staple cotton—strong and well suited to frequent laundering and steam sterilization.

Utica Sheets and Pillow Cases are made in all sizes, laundered, put up in dust-proof packages ready for use.

Sold by dry goods stores everywhere

Our "Mohawk" brand is a good sheet, not quite so heavy as "Utica."

UTICA STEAM and MOHAWK VALLEY COTTON MILLS :: :: Utica, N. Y.

Post-Hospital Treatment For Women Who Need Conditioning

Even after the most successful hospital treatment, many women require **systematic physical training** if permanent benefits are to be secured.

Remedial exercises for near-neurasthenics must be of a character that will arouse sufficient mental interest and incentive to dispel the languor and indifference usual to this class of patients. It is easy to tell these patients to take plenty of exercise and be careful in their diet, but it is difficult to induce them to follow this simple prescription.

Permanent results can be attained only when the patient is taught how to stand correctly, how to breathe and how to exercise normally. Every hospital practitioner has cases which would be greatly benefited by a scientific, individualized, personally-directed course of proper exercise, breathing, bathing and diet. My exercise will materially help your cases of chronic Constipation, Indigestion, Anemia, Neurasthenia, Weakened Heart Muscles, Undeveloped Lungs, Poor Circulation, and will increase the resistance, by building up and strengthening the physical and nervous system.

PHYSICIANS APPROVE OF MY WORK when they know its character; those who fully understand it frankly welcome my help for certain classes of their patients. The mental interest and incentive developed by the individual lessons dispel that indifference which physicians often find hard to overcome in some patients.

It is my custom to study each pupil's special requirements, and prescribe for her individually. I give no promiscuous exercise, but direct each woman according to her needs and her strength. I have spent years in the study of anatomy and physiology, and accept no cases where pronounced pathological conditions are present, as I know the possibilities of my work and I realize its limitations.

In many cases I insist that the pupil have the consent and advice of her physician; in others, a regular weekly examination by physicians is required.

For 12 years I gave personal instruction to women before attempting instruction by mail.

SUSANNA COCROFT

Dept. 104 — 624 Michigan Avenue, CHICAGO

Miss Cocroft has perhaps had a wider experience than any woman in America in prescribing remedial exercises for women.

Saves Labor— Reduces Expenses

The Simplex Ironer irons all flat and heavy pieces quickly and perfectly. Does the ironing in one-fourth the time required for hand work.

It is a great labor saver—one girl does the work of four with the

SIMPLEX IRONER
"THE BEST IRONER"

FOR HOSPITALS, HOTELS AND INSTITUTIONS

Any girl, without previous experience, can easily and safely operate the Simplex. It saves wages of extra help in rush times, as it has ample capacity without additional operators.

Noiseless, durable, efficient. Soon saves its low cost. We make sizes to meet every requirement. Price $45 and up.

Investigation will show that to employ the Simplex Ironer is a saving investment. Write for Complete Information, and Particulars of **30-Day FREE Trial Offer today.**

AMERICAN IRONING MACHINE CO.
530-168 N. Michigan Avenue, CHICAGO, ILL.

See our Exhibit at the Panama-Pacific Exposition, San Francisco, Manufacturers' Palace

Serial Stomach Examinations

SERIAL Stomach or Gastro Intestinal work requires speed and the proper degree of contrast in the negative, to permit of accurate reading.

Eastman Screen X-Ray Films are specially made for this class of work,—to fulfill the most exacting requirements of the Roentgenologist, at the minimum of expense.

For sale by all supply houses.
Pamphlet by mail on request.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

IMPERMEPHANE

(IM-PER-ME-PHANE)

A WONDERFUL, NEW IMPERMEABLE DRESSING

Takes the place of oiled silk, oiled muslin, and gutta-percha tissue

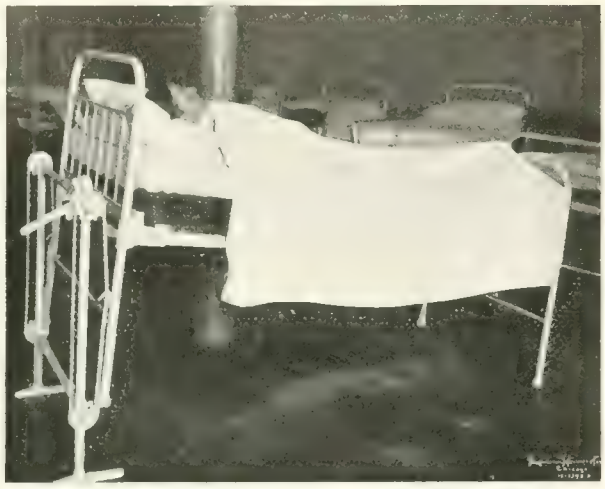
IMPERMEPHANE may be boiled, steam sterilized or sterilized in any solution. It will not deteriorate with age. It will keep in any climate.

IMPERMEPHANE is strong, tough, flexible, soft, light, and perfectly transparent. It will not crack, break, or stick. It has no taste or odor.

IMPERMEPHANE is impervious to all medications. It is superior to any other material for protecting wet dressings. For skin grafting no other dressing is comparable.

Sold direct to hospitals at wholesale. Price, $2.50 per box of ten square yards. Sent postpaid to any place in United States. Write for a package today. If you are not satisfied money will be refunded.

REID BROS. Manufacturers and Importers of Hospital Supplies
San Francisco, Cal., 585 Mission St. Seattle, Wash., 1303 Fourth Ave.

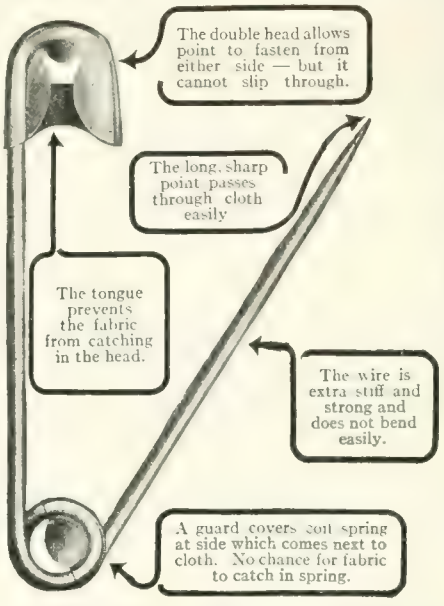


THE ERNEST BED JACK

is a very simple device easily applied to any ordinary bed and operated by one person. The bed can be raised to any desired position. The Ernest Bed Jack will sustain any necessary weight and cannot slip. It is compact, light, and out of the way. Made in sizes to fit 30 and 36-inch beds. Very inexpensive. Ask us for a demonstration. State size of bed in writing.

THE ERNEST BED JACK CO.
3551 Sheffield Avenue CHICAGO

Stewart's Duplex Safety Pins


The double head allows point to fasten from either side — but it cannot slip through.
The long, sharp point passes through cloth easily
The tongue prevents the fabric from catching in the head.
The wire is extra stiff and strong and does not bend easily.
A guard covers coil spring at side which comes next to cloth. No chance for fabric to catch in spring.

Send for Free Samples of Stewart's Duplex.

Made of superior higher grade of brass wire. Will not bend or unfasten easily. Both head and coil are absolutely protected by the guards. Rust-proof. We manufacture all grades and sizes of Safety Pins. Pack them especially for Hospital use—5 gross in a substantial box—loose—ready for use at a moment's notice.

Samples and price list free on application.

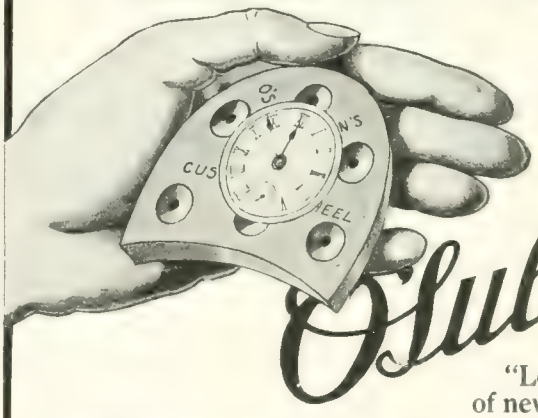
Minimum shipment of safety pins, 25 gross.

Stewart's Paragon Brand "bank" or toilet pins, packed in handy half-pound boxes, are indispensable in the modern hospital.

CONSOLIDATED SAFETY PIN CO.

BLOOMFIELD, N. J., U. S. A.

Watch Your Step



"I do", says a well known physician, "that's why I wear

O'Sullivan's HEELS

"Long ago I learned that wearing heels of new live rubber meant greater comfort, less fatigue and a notable decrease of nervous irritability. I found I could be on my feet longer, walk further and feel less tired. All this enabled me to do more work and better work.

In a hygienic sense, therefore, "Watch Your Step" is only another way of saying '*O'Sullivanize* your walk'."

SEND FOR MEDICAL BOOKLET

O'SULLIVAN RUBBER CO., 131 Hudson St., New York.

The Relation of Corset to Poise

by

The H. W. Gossard Co.

Largest Makers of Fine Corsets

1006 South Michigan Avenue

CHICAGO U. S. A.

IN the normal body, a harmonious adjustment of parts maintains a perfect balance of the whole. When the position of any part is shifted out of harmony with the rest—"out of plumb"—balance can only be regained by the compensating shift of another part. This requires a decided and abnormal effort. Persisted in, it results in strain.

Thus it is that many backaches, formerly ascribed to "weak back," "kidney trouble," "lumbago," etc., are now recognized as static backache, the pain being due to strain on the tissues and muscles of the lumbosacral region, caused by the effort to maintain body balance.

Although this condition is sometimes the result of irregularities within the body itself, it is probably more often than not due to incorrect corseting. It is by no means rare.

An extensive study of static backache was made a few years ago by two prominent Boston physicians, Drs. Reynolds and Lovett, from whose articles we have adapted the sketches on this page showing the positions induced by bad corsets as contrasted with the positions assumed when the woman is fitted to a correct corset.

Figure 1 shows in the dotted outline the position that is induced by a bad corset, the solid line indicating the normal. Note that the shoulders and hips are too far back. The original position of the center of gravity is indicated by the solid vertical line and the induced position by the dotted vertical line.

Figure 2 shows in like manner the effect of a bad corset which throws the shoulders forward and the hips backward.

Figure 3 indicates by its dotted outline the position that is induced by a good corset, the normal again being shown in solid line.

It is this perfect, normal body balance that has been striven for and attained in the design of all models of Gossard Corsets.

Briefly, the Gossard Corset is designed so as to be a help to the abdominal muscles, working with them in the support of the viscera without compression, and an aid to the correct poise, so that the center of gravity will be properly placed; thus preventing static backache and other symptoms which are the result of strained position.

Figure 1.

Figure 2.

To the nurse, upon whose bodily fitness depends to a considerable extent her efficiency, this relation of corset to poise is very important. For her own sake, as well as for the sake of the patients who depend upon her for service, she will find it well to acquaint herself thoroughly with this subject.

It is gone into, clearly and completely, in "The Hygienic and Medical Uses of Gossard Corsets," which discusses also all other important phases of modern corsetry. The student nurse and the graduate nurse, as well as the physician, will gain much of value in securing this book and reading it carefully.

"The Hygienic and Medical Uses of Gossard Corsets" will be sent to individuals upon request, and sufficient copies will be sent at the request of training school heads to supply all student nurses.

Please address the H. W. Gossard Co., 1006 South Michigan Avenue, Chicago, Ill.

Figure 3.

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the world over

The Dependable SNOOK in a New Garb

Refined—improved—and made still more efficient. Yet embodying the same essential principles that have been standard for best results since the first SNOOK Interrupterless Machine (***still in daily use***) was produced nearly a decade ago.

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The New "Enclosed Type" of SNOOK X-RAY APPARATUS

Roentgenologists are offered the highest type of equipment for the x-ray laboratory ever evolved—with the widest possible range of efficiency for every branch of Roentgenological work. Its exclusive features are of the greatest importance in insuring uniform, dependable results.

Built with characteristic SNOOK care for rigorous service through the years to come—essential to the equipment of any x-ray laboratory of the highest grade.

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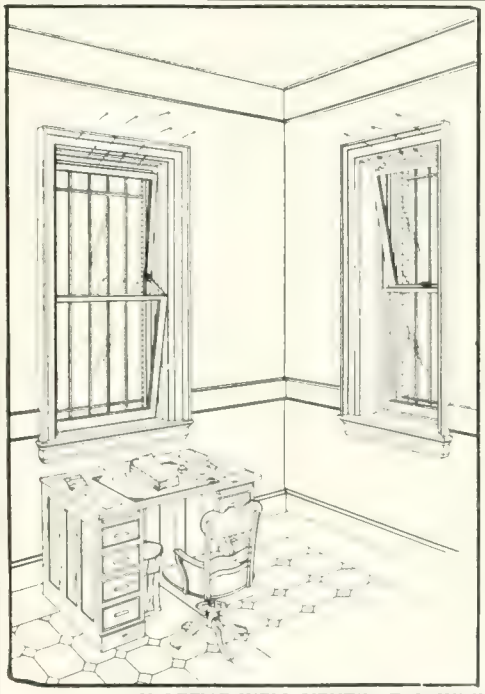

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Sashes can be taken out of frame without use of tools.

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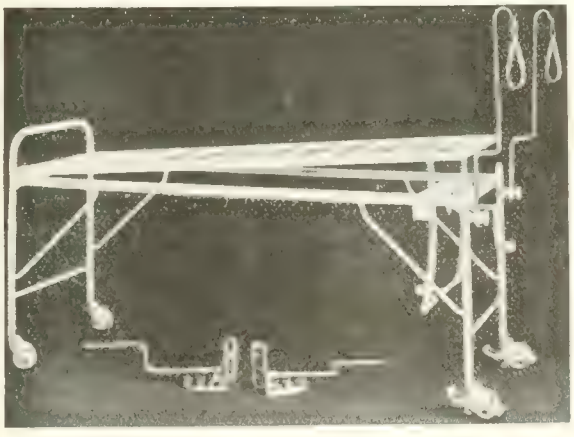

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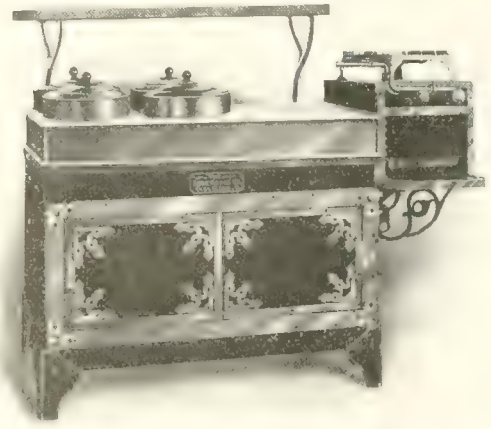

Cut shows a combination ward steam table, warmer, hot plate and toaster. Very compact, built of high-grade materials and neatly finished.

OUR line comprises ranges, broilers, ovens, warmers, coffee and tea urns, steam cookers, dish washers, and sterilizers, sanitary sinks, sanitary cook tables and work tables, and a variety of special gas and steam cooking appliances. We plan the kitchen and equip it complete.

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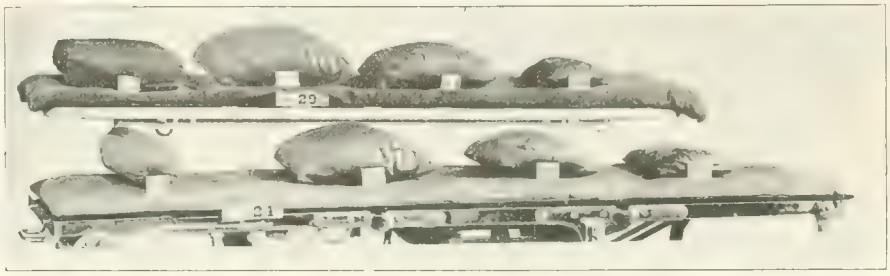

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Send for a trial set to be used 30 days. If not as we say you may return it.

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Bohn Syphon System of circulation insures a rapid and continuous movement of cold dry air as long as there is ice in the chamber.

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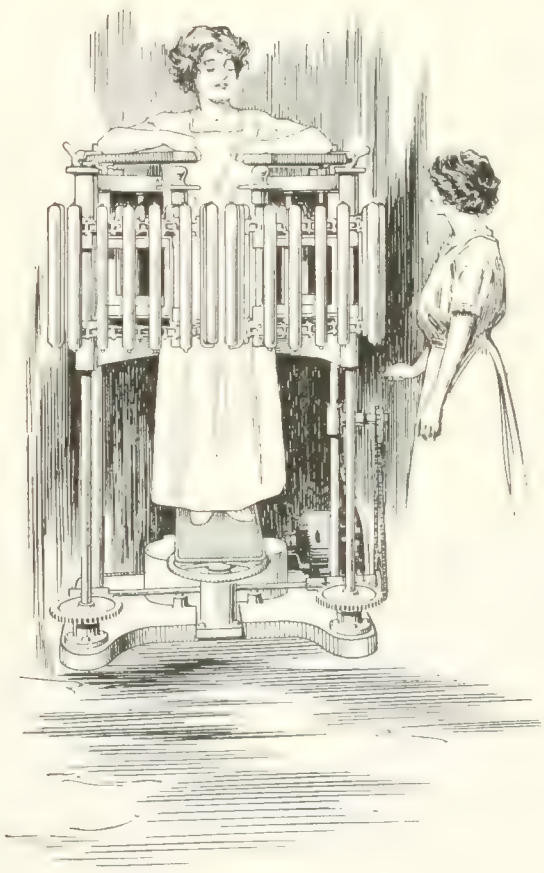

This machine is invaluable in all cases of poor circulation or faulty elimination and wherever exercise is indicated.

It will reduce blood pressure and is a specific for corpulency.

It is of great value in toxemia, locomotor ataxia or weak heart action. It will afford almost immediate relief for difficult breathing caused by fatty accumulation about the heart.

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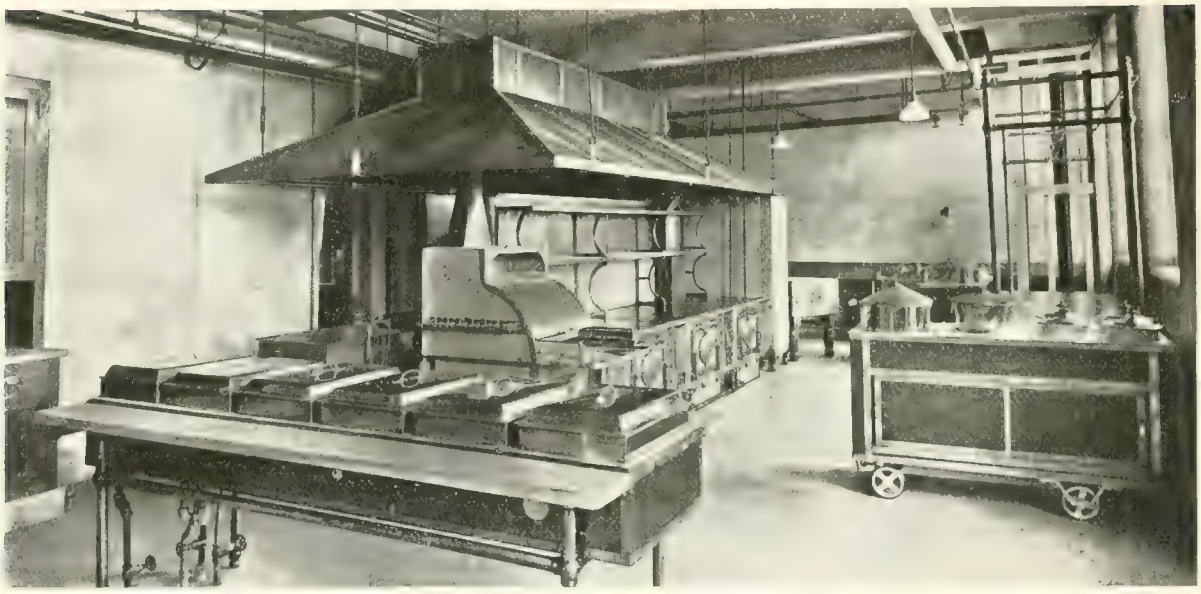

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THE kitchen equipment of the Leech Farm, shown above, is especially constructed for a tuberculosis institution in this respect: the table tops, drain boards, splash boards, etc., are *entirely of metal.* No wood is used. The ranges are finished in baked blue enamel with nickel-plated trimmings.

The Refrigerators are lined with marbleoid, which is impervious to moisture and seamless. All inside corners are rounded. Each compartment, therefore, is a one-piece receptacle, easily cleaned and absolutely sanitary.

AFTER this installation had been made, so complete as to all details was it that the city officials feared that the hospital people had been extravagant, and appointed a commission of three superintendents to investigate. The commission became completely converted to a belief in the economy of using only the best in kitchen and refrigerator equipment, and expressed its strong approval.

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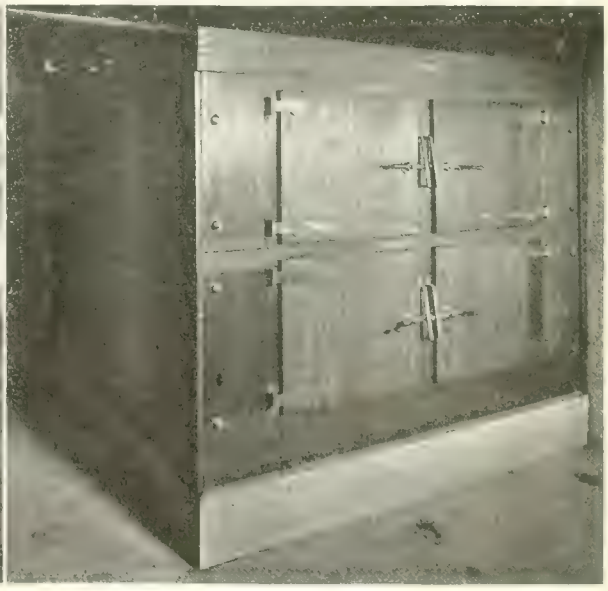

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Inner Spring Mattress

prevents patients from becoming *bedsore*. The ONLY mattress for *Chronic Invalids*.

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If prices rise no advance is made by us. If they decline we reduce the price of all previous purchases.

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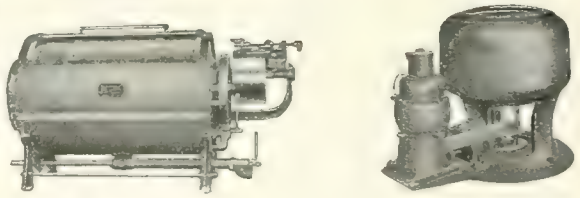

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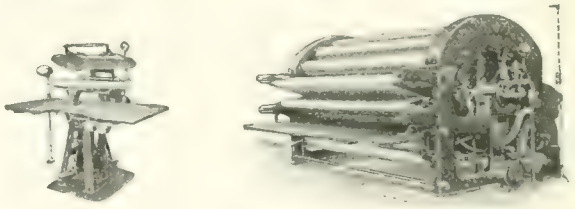

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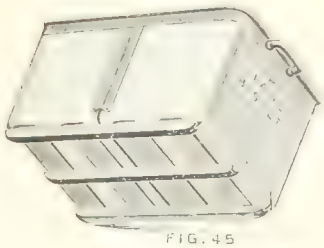

FIG. 45

LANE BASKET
Canvas Body Attached. Cleaned by scrubbing. Mounted on hardwood shoes.

LANE

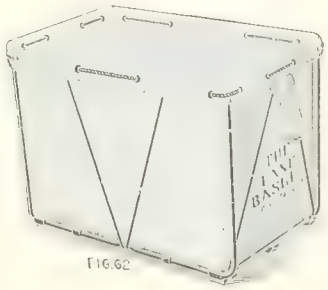

FIG. 62

LANE BASKET
Canvas Body Detachable. Unlaces from frame and is washed in washer. Galvanized non-rusting frame. Mounted on hardwood shoes.

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NOW USED BY MANY HOSPITALS AND INSTITUTIONS

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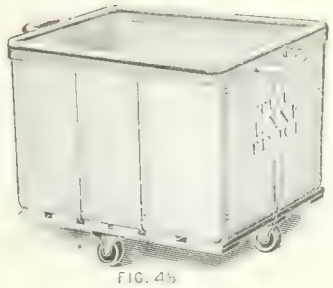

FIG. 48

LANE TRUCK
Canvas Body Attached. Mounted as shown, or on swivel casters, either iron or rubber.

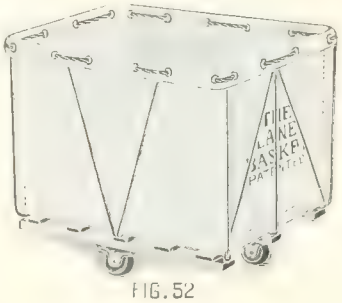

FIG. 52

LANE TRUCK
Canvas Body Detachable. Frame galvanized and non-rusting. Mounted as Fig. 48, opposite.

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GOLD MEDAL AWARDED KELENE

"KELENE"

PURE CHLORIDE OF ETHYL

FRIES BROS., Manufacturers, 92 Reade St., New York

FOR LOCAL ANESTHESIA
also as adjuvant to Ether
IN GENERAL ANESTHESIA

Entirely harmless. Free from all dangerous after-effects. Easily applied. No irritation of the system from *injection of drugs*. Avoids use of the hypodermic needle.

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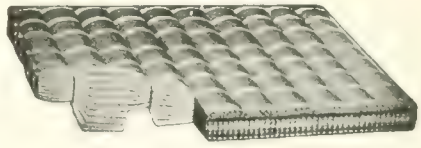
is separately filled. The amount of filling for each is weighed. Those compartments which have the most wear contain the most filling. *It is scientifically built.*



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NO DIRT POCKETS
NO TUFT TO PULL OUT

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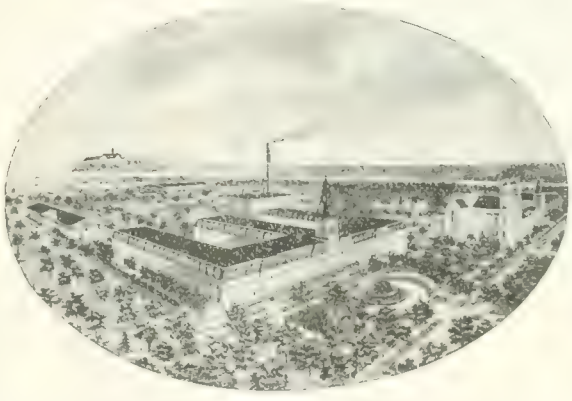

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OAKWOOD SPRINGS SANITARIUM—For mental and nervous cases requiring guardianship. All rooms are private, and each patient may have a room or suite, as may be required. There are no wards. Utmost freedom of house and grounds is afforded. Many of the most pleasant rooms can be entirely isolated from all others. A number of the bed rooms have private baths. The plumbing, heating, and electric lighting are new and modern. Superior system of ventilation. The building is fireproof. There are private parlors and dining rooms, trained nurses, teachers and masseurs. Located in beautiful park of seventy-three acres, overlooking the lake and city. No crowding is at any time permitted.

LAKESIDE SANITARIUM—For medical and general sanitarium cases requiring specialized treatment for nervous and mild mental diseases, with two buildings and grounds of ten acres, charmingly situated on the shores of the lake. Every useful form of bath and hydropathic procedure is provided, together with gymnastic exercises, Swedish movement and massage. Mental exercise and drills, together with requirements of physical and mental performance, are promoted, with a view to restoring, strengthening, or developing the faculties, particularly those of perception and will.

An invitation is extended to superintendents and hospital physicians to refer to us such of their nervous and mental disease patients as cannot be satisfactorily cared for in general hospitals. Our institutions are completely equipped and efficiently administered for these classes of patients; furthermore, the extent, topography, and beauty of the grounds and the advantages of Lake Geneva climate have a most salutary influence.

TO SAVE TIME, Hospital Superintendents and Physicians who refer patients to us are requested to call Superintendent or Assistant by long-distance telephone (Lake Geneva, 159) and direct operator to reverse the charges when wishing to inquire concerning the admission of patients. When notified of the time of expected arrival in Lake Geneva, carriage will be sent to the station to meet patients arriving.

For further information address

DR. OSCAR A. KING, Superintendent, LAKE GENEVA, WIS.

Or at Private Office, 7 West Madison Street, Corner State Street

Phone, Central 2508 **CHICAGO, ILL.**

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Sanitarium, 3001 The Paseo
KANSAS CITY, MO.

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HALL'S VITRIFIED WHITE BODY FIRE-PROOF COOKING CHINA is the hardest and strongest ware on the market. It is almost unbreakable. It is acid-proof and fire-proof; it will stand all possible changes of temperature. In durability it is unsurpassed.

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EGG CUSTARD

OVAL CASSEROLE

EVEN more important a feature is the fact that HALL'S COOKING CHINA **can not craze.** The advantage of this from a sanitary standpoint is clearly shown in the article on the opposite page taken from THE MODERN HOSPITAL. HALL'S is the only china of which this is true because it is the only chinaware in the world in which body and glaze are produced **at one firing** (temperature 2400 degrees). The result is a china **absolutely non-absorbent**—a sanitary feature of great importance.

HALL CHINA is made in the following forms: teapots, coffee-pots, casseroles, custards, shirred egg dishes, ramekins, pot pie dishes, and others. Individual servings cooked in these dishes are economical, easily kept hot, and in every way more delicious than food served in other ways. Because of its non-porous nature, the same dish may be used for various foods or beverages without effect upon the flavor.

We also make solid vitrified white china, coffee urn linings, steam table pots and bain marie jars. Write us for names of users, for catalogue and for list of near-by jobbers.

THE HALL

EAST LIVERPOOL,

almost unbreakable cooking ware

COOKING CHINA

Cannot absorb moisture or grease

EXTRACT FROM THE MODERN HOSPITAL OF JULY, 1915

Red-clay earthenware is produced by first moulding the clay to the desired shape, next coating the inside surface with white slip, and then baking in a kiln at a temperature of from 2,000 to 2,200 degrees F. After being taken from the kiln the piece is dipped in liquid glaze, which is practically glass, and is again fired at a lower temperature than the first firing; this second firing melts the glaze and produces the thin skin of crystal glass which, after baking, forms the outside of all red earthenware.

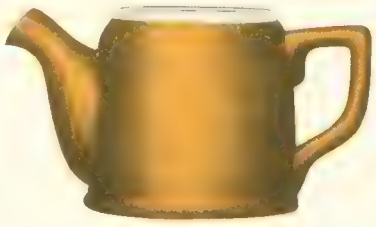
As a result of this process of manufacture, we have, first, a white surface inside the vessel; next, the porous red clay body, which has been heated to the same temperature as the white surface; and outside of this a sheet of glass, which has been produced at a lower temperature than the two other strata to which it is attached.

Take a piece of broken red earthenware and apply a drop of ink to the red surface, then watch the ink rapidly disappear; its progress through the porous clay can be seen through the white lining as it travels by capillary attraction. This proves conclusively that when the clay body of the utensil is exposed to liquid—as it will be if a piece of the inside lining or the outside surface is chipped off—whether this liquid be the greasy water of the dishpan or the water or juices in the food, that liquid will be absorbed into the body of the utensil and will stay there. There it must undoubtedly cause deterioration of the utensil, besides being unsanitary.

Owing to the different densities of the body, the lining and the glaze, the expansion under heat and contraction when cooling is not the same, consequently the more rapid expansion of one or the other substance breaks the surrounding coating into hundreds of small cracks, which process is called crazing. If any colored liquid or grease is put in a crazed vessel it will be found that it settles in these cracks, and, being absorbed by the exposed porous clay beneath, the color cannot be washed out, no matter how much scrubbing is done.

These facts, which may be easily proven by a simple test with a piece of broken or crazed ware and a little ink or dirty water, show conclusively that a china which will not craze and which cannot absorb moisture even when chipped, must be more desirable for cooking purposes from a sanitary point of view. Consider also the standpoint of durability under the heat of the cooking oven: a vessel of uniform density of walls will be immune from breaking by heat, which cannot be the case to the same extent with a vessel like the red earthenware having walls of three different densities.

LARGE BAKING DISH



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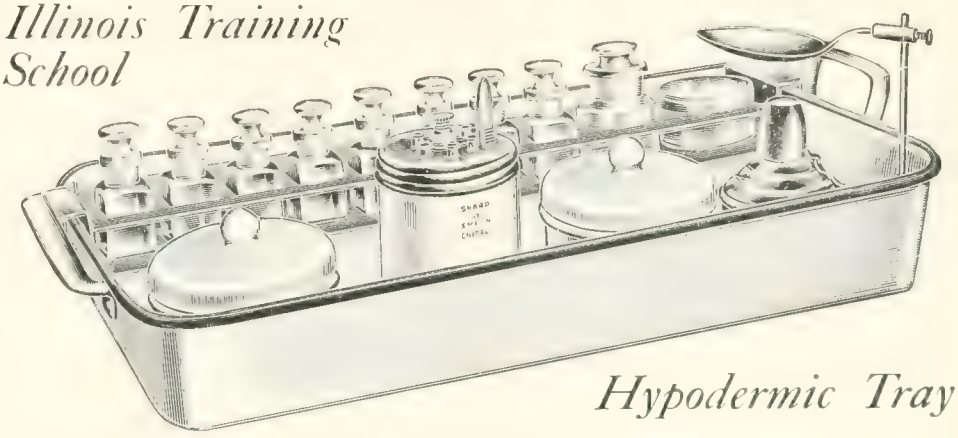

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In connection with the assortment of articles that go to make up this tray, we believe it will prove to be a valuable and essential outfit from many standpoints in simplifying hospital work and furnishing every article necessary to the finger-tips of the nurse for administering hypodermic solutions in a thoroughly antiseptic way.

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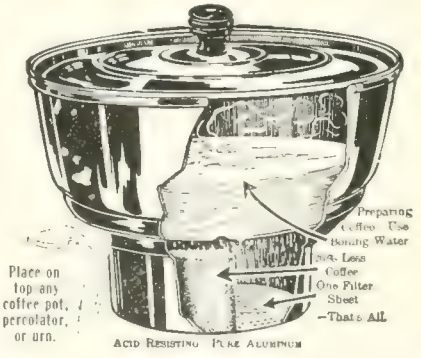
Leave with the grounds the harmful tannins and rancid fats.



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The Battle Creek Sanitarium, Battle Creek, Mich.

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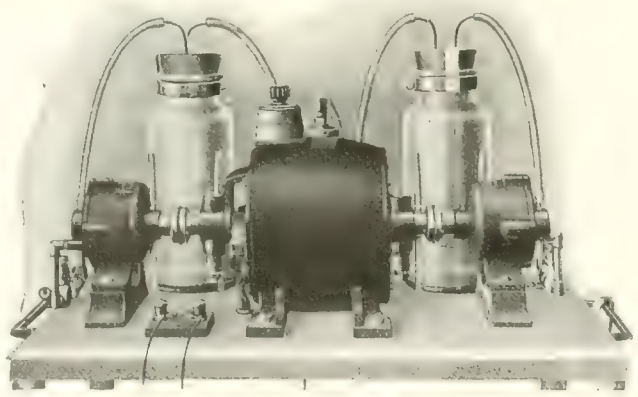

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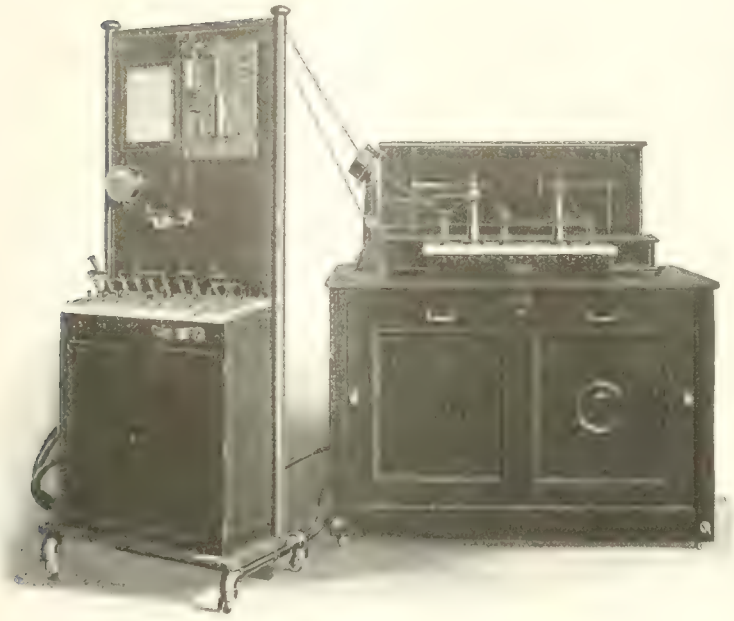

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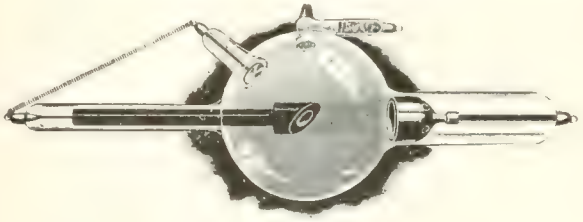

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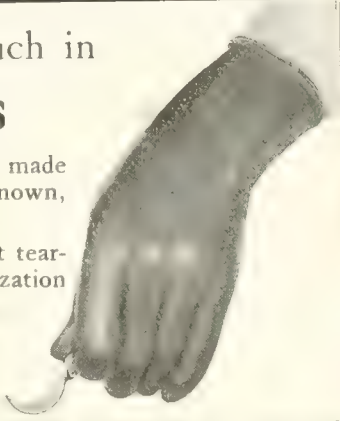

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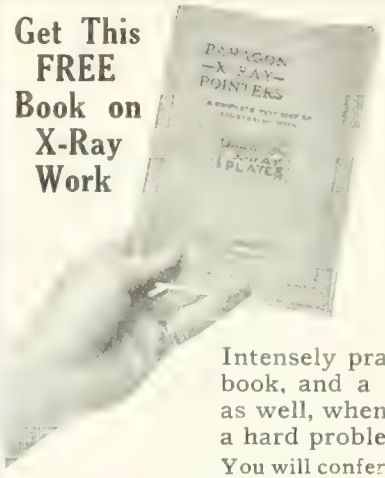

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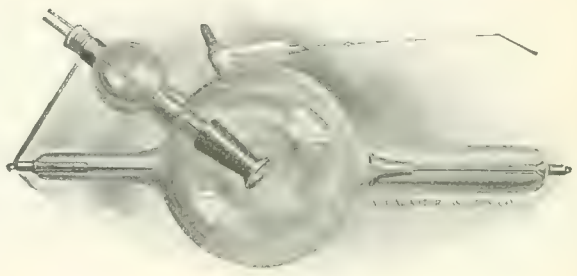

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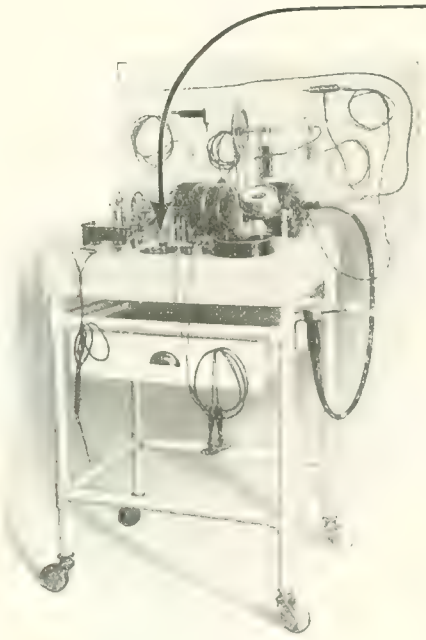

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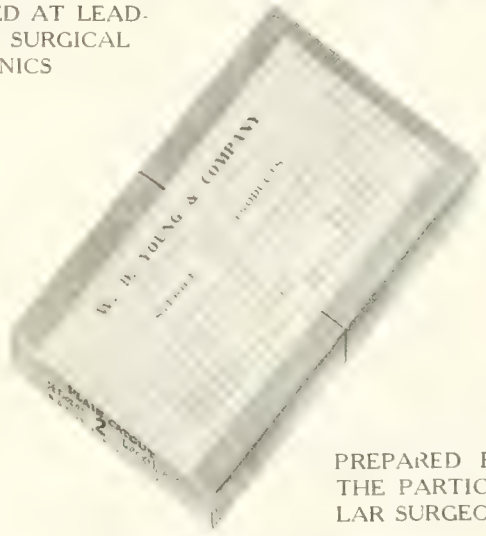

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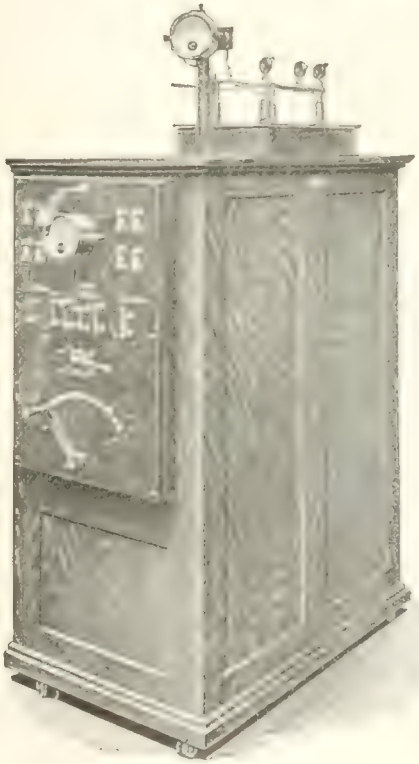

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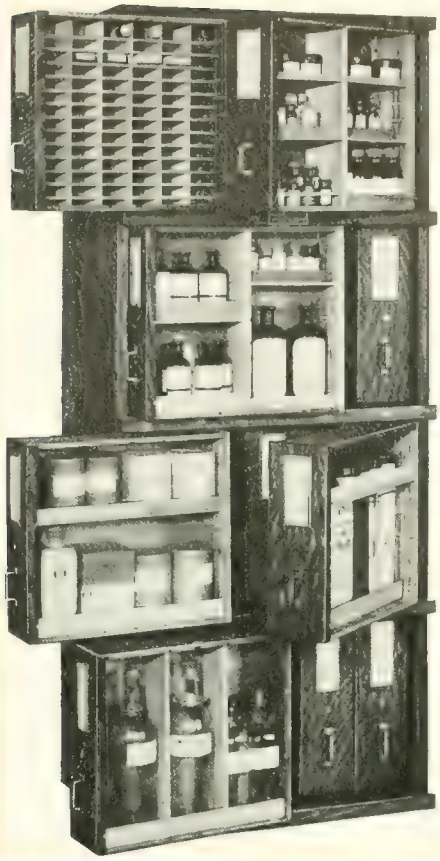

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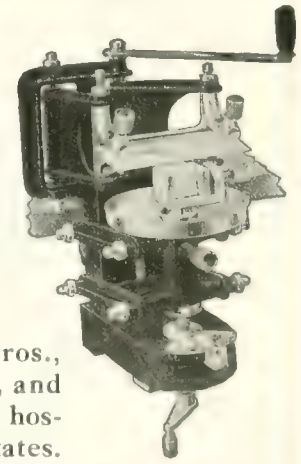

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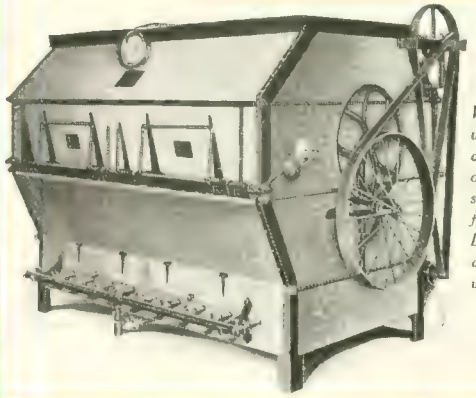

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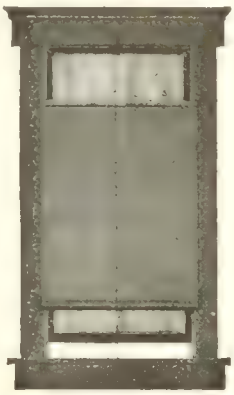

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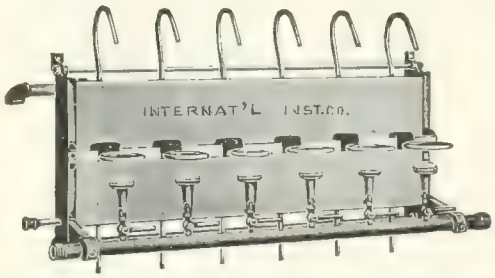

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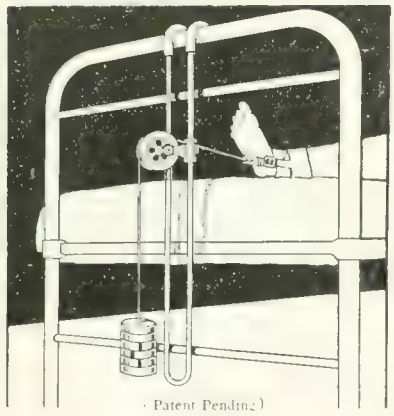
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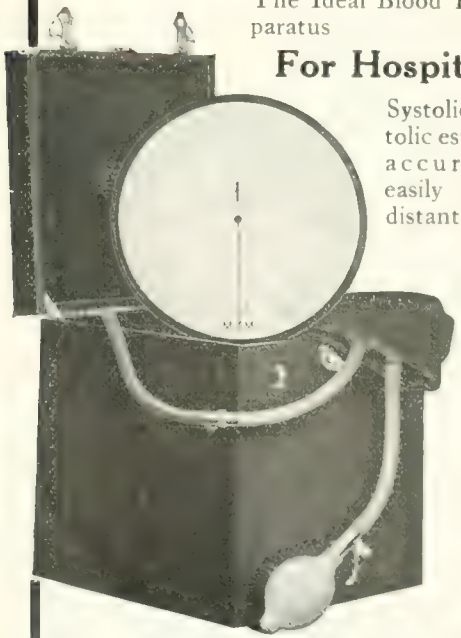

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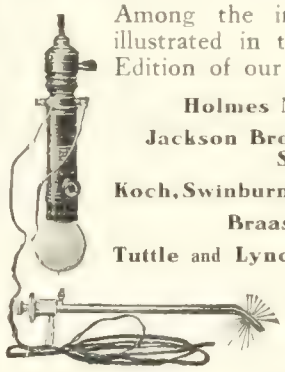

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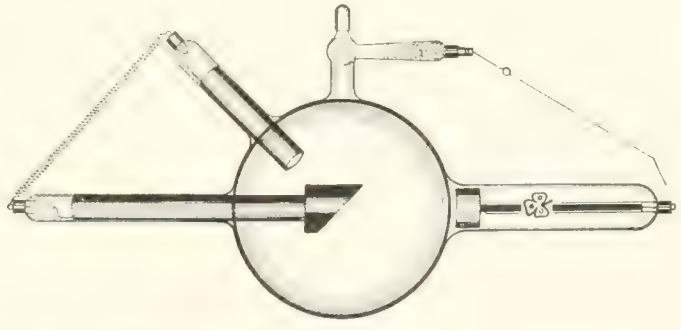

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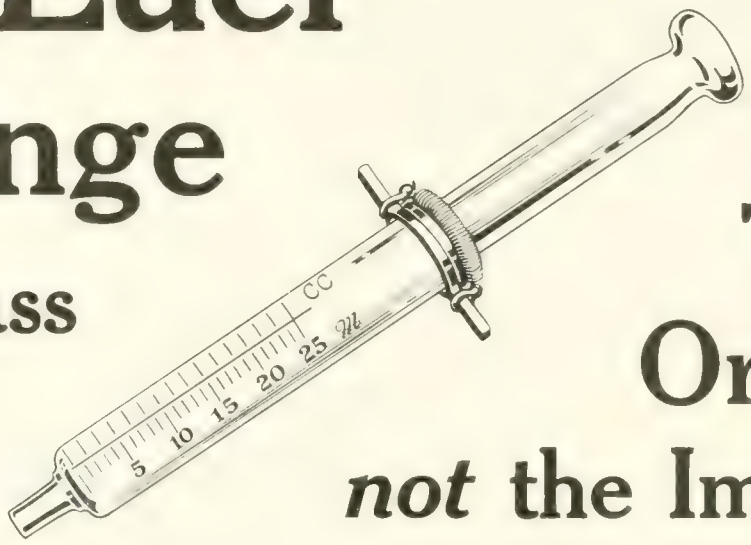

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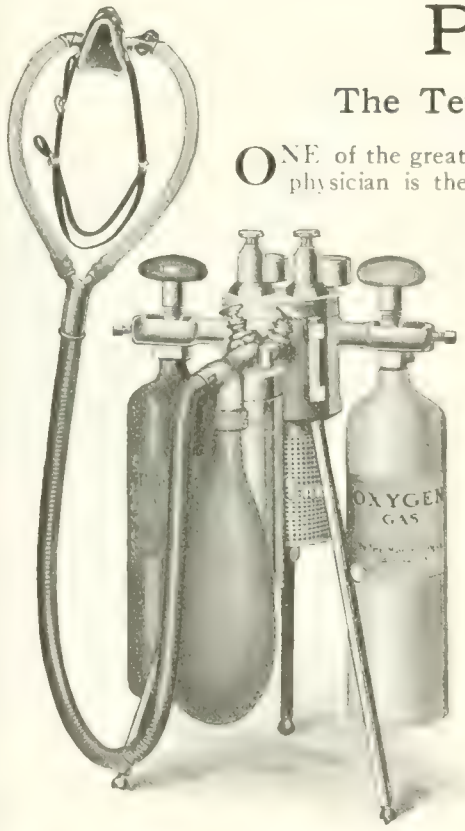

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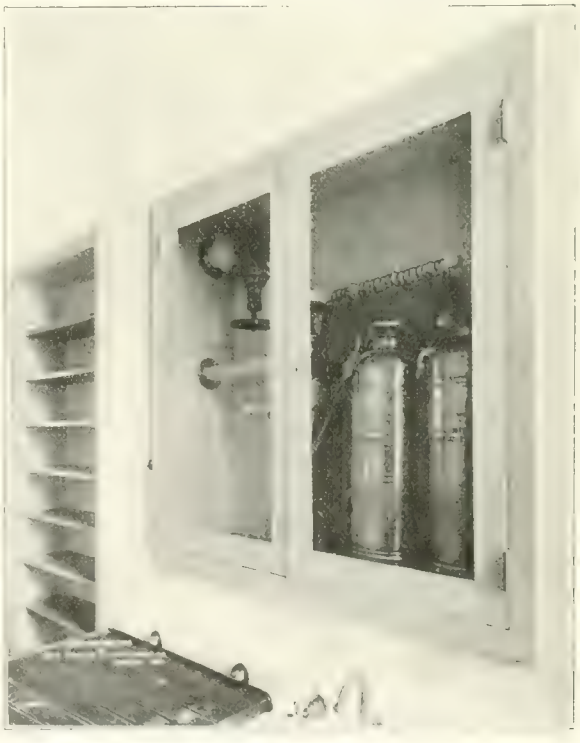

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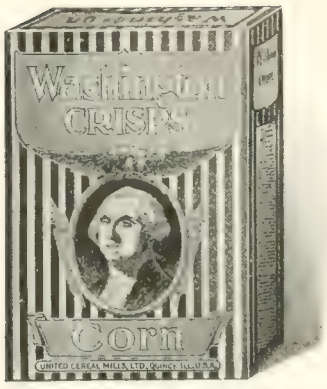

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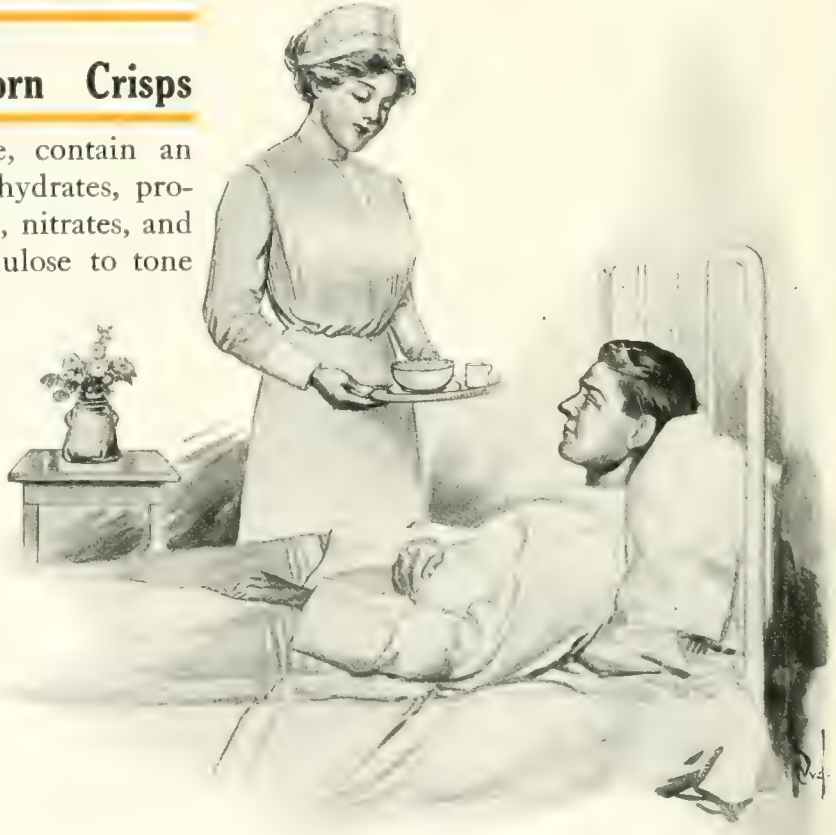

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SUPPLIED GAUZE BY LEWIS MFG. CO.

WHY? Because it has been proven to be a satisfactory and reliable product.

LEWIS MANUFACTURING COMPANY'S PRODUCTS
(LOOK FOR THE TRADE MARK)

Curity

are the result of fifty-five years of scientific study and experience. No more convincing evidence of their superiority can be given than the fact that LEWIS MANUFACTURING COMPANY'S Gauze has been adopted for use in the finest hospitals in America, after the most careful and exacting test.

Write for Special Prices

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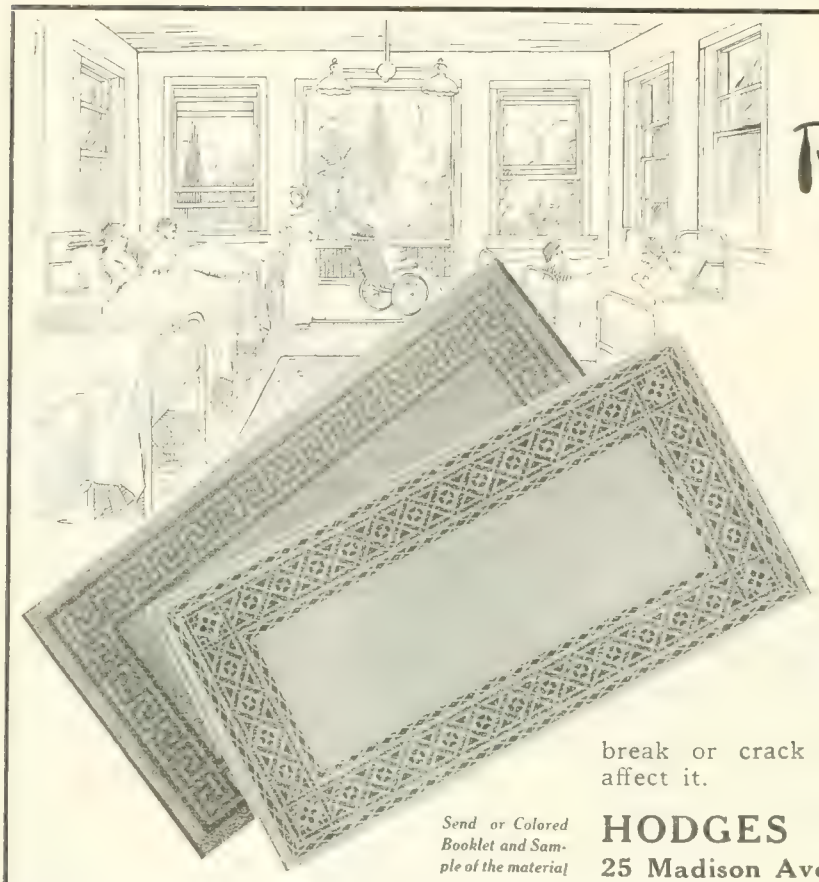

HODGES RATTANIA

TRADE MARK REGISTERED

RUGS

the *perfect* floor covering for the

HOSPITAL

Rattania is made in Rugs and Runners—plain and with stenciled borders—as appropriate for Reception Rooms, Offices and Dormitories as for the Hospital itself.

Absolutely **SANITARY**—Rattania is made of a heavy waterproof fiber, and may be sterilized with no injury to the fabric. The wheeling of heavy cots or furniture will not break or crack Rattania, nor does heat or cold affect it.

Send or Colored Booklet and Sample of the material

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25 Madison Avenue NEW YORK

Von Duprin

Trade Mark Registered U. S. Pat. Office, No. 57621. Pat. U. S. and Can.

Self-Releasing Fire Exit Latches

Are your exit doors safeguarded? A few dollars' expense for VON DUPRIN equipment would surely give you mental relief — would it not?

Sixty years of experience in the merchandising of Builders' Hardware **guided us in the production of these Latches.** They have stood the test in every competition, and have proved satisfactory wherever applied. That the mechanism is as good as new after years of service on a school house door is proof positive of substantial construction. This quality, we assert, is found only in the VON DUPRIN Self-Releasing Fire Exit Latches. They are the best. Specify VON DUPRIN and demand them.

Ask for list of theatres equipped with VON DUPRIN. Send for Catalogue No. 121.

No. 2227
Inside Elevation

"Safe exit is a universal demand."

See Sweet's Index for complete specifications, pages 800 to 804

VONNEGUT HARDWARE COMPANY
General Distributors, 120-124 E. Washington Street, INDIANAPOLIS

Fire! Fire! Fire!

A sound that sends terror.

You insure against property loss; you should insure against loss of life.

THE *McFell Fire Alarm* SYSTEM

Is reliable insurance for both life and property. No hospital is safe without a reliable fire alarm system.

Write for particulars

McFELL SIGNAL COMPANY
2857 South Halsted Street
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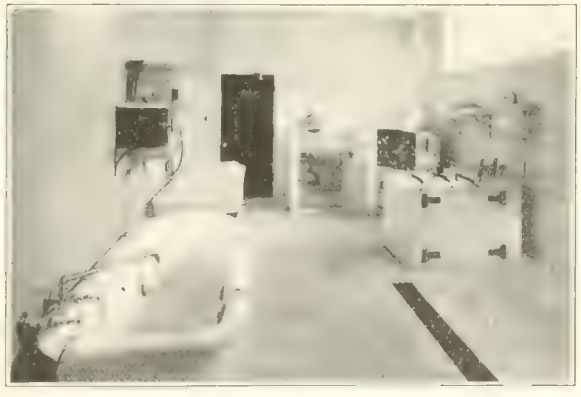
Forduce Baths, Hot Springs, Arkansas. Wolff Equipment Complete by Hot Springs Plumbing and Mach. Co.

Perfect Facilities

for physician, surgeon and nurse, perfect and easily preserved sanitation, are the ideas embodied in every Wolff Hospital Fixture.

A constant effort, through years of practical experience, to improve in design and to maintain the highest quality, together with painstaking care in manufacture down to the smallest part, make Wolff Equipment the sign of greatest efficiency in modern hospitals.



Hydro Therapeutic Installation, Forduce Baths

The Wolff line of Hospital Fixtures is complete, and many special designs of great merit are being added from time to time.

We invite your consultation either on complete equipment or single fixtures that may be needed.

L. WOLFF MANUFACTURING COMPANY

MAKERS OF PLUMBING GOODS FOR SIXTY YEARS. THE ONLY COMPLETE HOSPITAL LINE MADE ENTIRELY BY ANY ONE FIRM

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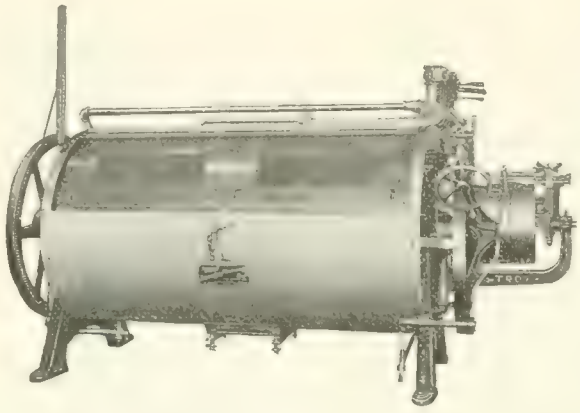
BRANCHES: TRENTON, DENVER, OMAHA, DALLAS, ST. LOUIS



The Trojan Does as Much as Four Ordinary Washers

It will do all the work that can be done in four ordinary washers, will do it quicker and better and save space and every ingredient used in the washing process.

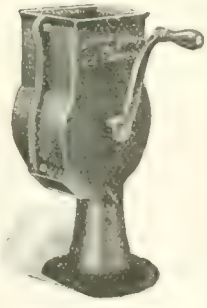
Send for special circular

Troy Laundry Machinery Co., Ltd.

CHICAGO NEW YORK SAN FRANCISCO

HOSPITAL EFFICIENCY DEMANDS LITTLE GIANT ICE CHIPPERS

Save Time—Labor—Money
Always Sanitary



Little Giant Ice Chippers provide the only sanitary way of handling ice. They do your work day in and day out in a clean, thorough manner. They provide an immediate way of increasing the efficiency of your service.

WHAT THEY DO

You are now chipping your ice by hand. That takes time, involves labor and there is a constant waste of ice. Using a Little Giant you will save much time, labor and there will be no waste. A Little Giant will pay for itself several times over in a year

The top illustration is our Little Giant No. 2, which will chip you 30 lbs. of ice per minute. The lower picture is our No. 90 with hopper open, which will chip you 100 lbs. per minute. Our No. 5 will also chip 100 lbs. per minute. We also make many other sizes, to suit any needs. The Little Giant is built for long service and is fully guaranteed. Send for catalog No. 20-A, showing complete line and giving detailed description.

B. L. SCHMIDT COMPANY
Davenport, Iowa, U. S. A.

Annual Reports

are most effective when printed with the same clearness that you make your verbal announcements.

This publication speaks the quality of our work, and all readers of your literature will appreciate the same clearness of type and illustration.

We print under the supervision of expert designers, on the assumption that the best work is cheapest. With this point uppermost, consult

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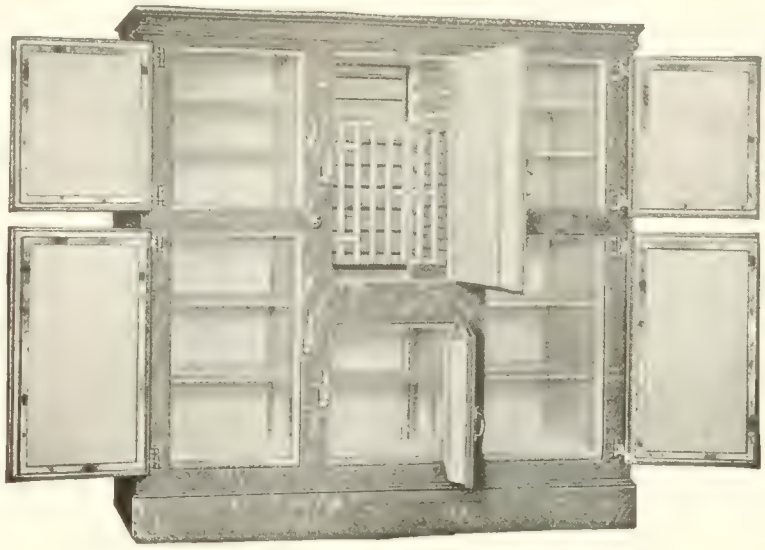


Especially built for hospital needs

In the hospital perfect refrigeration is vital.

The food for patients must be absolutely fresh and wholesome. Any danger of infection, contamination or taint must be eliminated. The diet kitchens must rely on the refrigerators to preserve the foods. That's why the modern hospitals select

McCray Sanitary Refrigerators

The officials in charge of hospital equipment are familiar with the efficiency of the McCray. They know from tests and experience that McCray Refrigerators best meet the exacting and rigid requirements demanded in hospital kitchens.

The McCray may be arranged for either ice or mechanical refrigeration. We take special interest in Built-to-Order hospital equipment and will co-operate with architects who are planning the erection of hospital buildings. Confer with our designing department for the latest developments in refrigerator construction.

In addition to the list of prominent hospitals, the McCray is used in the United States Pure Food Laboratories, United States Commissaries. the United States Senate Restaurant, numerous other Government buildings, battleships, forts, etc.

Write for Special Catalog:

No. 50—*Hospitals and Institutions* No. 92—*For Residences*

The McCray Roll of Honor

A few of the many prominent hospitals that are equipped with McCray Refrigerators and Coolers:

Cook County Hospital—Chicago
Jefferson Medical College—Philadelphia
St. Luke's Hospital—New York
Presbyterian Hospital—Chicago
Royal Victoria Hospital—Montreal
Rockefeller Institute—New York
University Hospital—Ann Arbor
Providence Hospital—Seattle
Lakeside Hospital—Cleveland
United States Naval Hospital—Washington

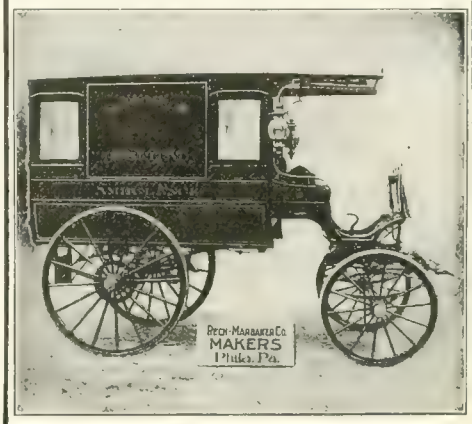
McCRAY REFRIGERATOR COMPANY

795 LAKE STREET KENDALLVILLE, IND.

For salesrooms in your city see your local telephone book

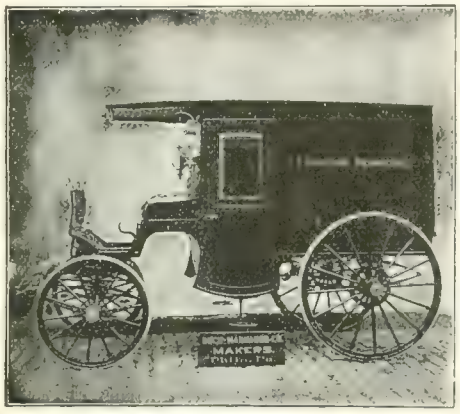
Red Cross
Horse-Drawn Ambulances

Horse Drawn Ambulances
of
Any Special Design
Made to Order



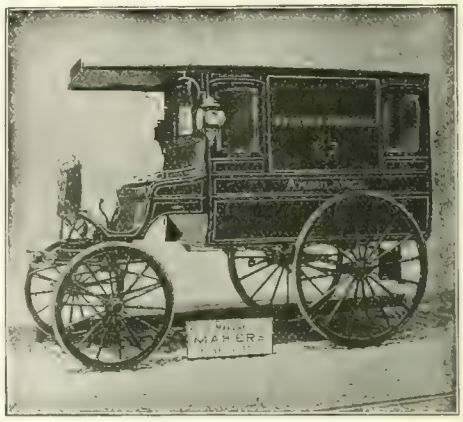
Natchez Hospital—Natchez, Miss.

Ambulances We Make
are
Constructed With Care
And Guaranteed



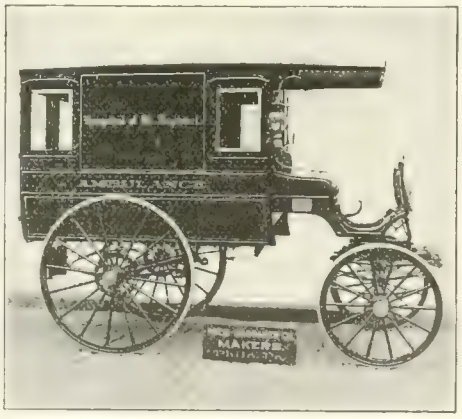
Leonard Hospital—Troy, N. Y.

Good Samaritan Hospital—Lebanon, Pa.



Stetson Hospital—Philadelphia, Pa.

The Workmanship
of
All Our Ambulances
Is Without Flaw



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Perfect Material
and
Perfect Workmanship
Is Our Motto

Catalogue Sent on Request

RECH-MARBAKER COMPANY

Girard Avenue and Eighth Street, Philadelphia, Pa.

This is the third of a series of articles on the uses of Stanolax—tasteless, odorless Liquid Paraffin.

The facts presented in this series of announcements are based on authoritative clinical data.

Made from American Petroleum

A Gentle, But Efficient, Corrective

STANOLAX acts in the intestinal tract as a lubricant and protective agent. It causes no irritation and no dissipation of strength.

The lubricant and solvent action of STANOLAX removes all waste from the kinks and folds of the intestines, but without irritation.

At the same time, it exerts a protective action on the intestinal mucosa to such an extent that liquid paraffin has been described as an artificial intestinal mucous.

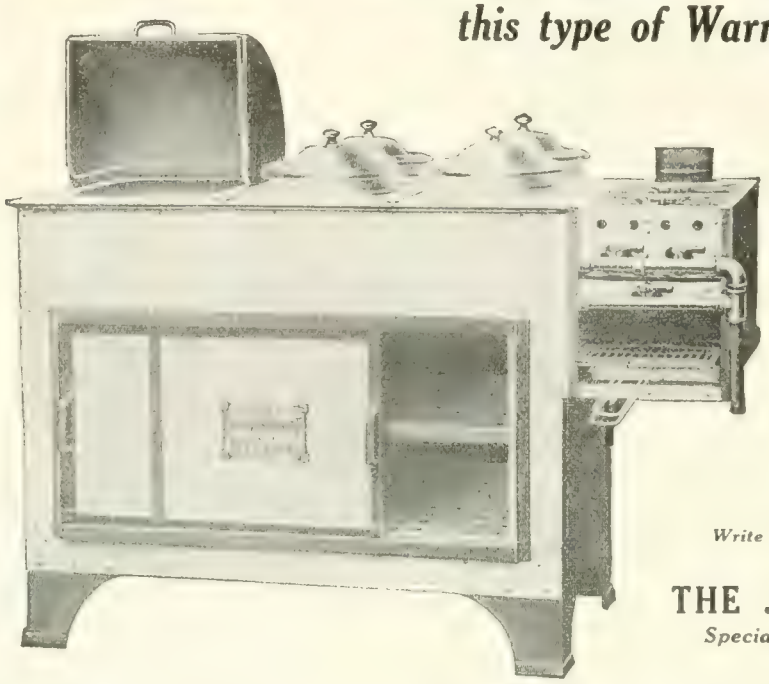
Stanolax Liquid Paraffin

Lane, Sir W. Arbuthnot (Guy's Hosp. Ga., Lond., 1911, XXV, 405; Lancet, 1911, II, p. 1540; Brit. Med. Jour., 1913, II, p. 1126; Proc. Roy. Soc. Med., 1913, VI, p. 49; Surg., Gynec. and Obst., 1913, p. 600) Lane recommends liquid paraffin as an ideal remedy for intestinal stasis, its action being to lubricate the intestines and keep the stools soft, thus enabling the feces to pass more readily through the angulations of the bowel. Describing the autointoxication found in these cases, he states: "The delay in the passage of the bowel content through the small intestines, the duodenum and also through the stomach, results in the infection of these parts by organisms, and in the development of chemical changes in the stagnating material. Such changes cause the absorption into the circulation of a greater quantity of toxins than can be dealt with effectually by the organism." He advises for non-operative cases the use of liquid paraffin before each meal. "This precedes the food in its passage along the canal and facilitates the effluent. As it cannot be absorbed, it renders the motions fluid, and insures one or more evacuations daily." In the slighter degrees of obstruction, the use of an abdominal support and sufficient treatment with liquid paraffin is enough to counteract any defect in the drainage.

A trial quantity and fully descriptive booklet will be sent gladly on request.

STANDARD OIL COMPANY
(INDIANA)
CHICAGO, U. S. A.

All the hospital serving kitchens in the New Cincinnati General Hospital, Cincinnati, Ohio, were equipped with this type of Warmer exclusively—



It is known as Van's Combination Hospital Carving and Serving Table, and is a long-felt want in hospitals for wards and diet kitchens.

The top is of White Enamel and and is Thoroughly Sanitary. The Meat Dish is of White Enamel, with heavy tin telescope cover, and there are four 1¾-gallon white glazed steam-tested stone jars with nickel-plated copper covers. Water Pan is made of heavy cold rolled copper. Plate warmer underneath. Can be heated by steam or gas.

Any number of meat or vegetable dishes can be added.

Write for information about this or any other kitchen equipment required

THE JOHN VAN RANGE CO.

Specialists in Hospital Kitchen Equipment

CINCINNATI, OHIO

TEN—YEAR GUARANTEED *Inner Braced Furniture Never Has A Loose Joint*

Invisibly Steel Reinforced As A Modern Building 17 Inches of *INNER BRACED* Chair Hitched to ½ Ton

Catalogue Explains *THE INNER BRACED FURNITURE CO.*

ELKHART, INDIANA

WHY? **BECAUSE!**

FRENCH FLINT TILES

FOR FLOORS AND WALLS

FROM COMBINED FACTORIES OF MESSRS.

BOCH FRERES

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and

VILLEROY & BOCH

METTLACH MERZIG

Chicago Exposition, 1893—Highest award. Paris Exposition, 1900—Grand Prix. St. Louis Exposition, 1904—Highest award. Introduced here since 1881.

Our References—For Material Furnished and Work Set Complete:

Bellevue Hospital, Ft. East 26th St., N. Y. City
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Johns Hopkins Hospital, Baltimore, Md.
Metropolitan Hospital, Blackwells Island, N. Y. City
Pennsylvania Hospital, Spruce St., Philadelphia
Sherbrooke Hospital, Sherbrooke, Canada
St. Anthony's Hospital, St. Louis, Mo.
St. Joseph's Hospital, Omaha, Neb.
Toronto General Hospital, Toronto, Canada
And Others

We request communication with any of the above Hospitals as to the merit of our material

RUDOLPH SCHROEDER, *Inc.*

442 Greenwich Street, N. Y. City.

Sole Agents for the United States and Canada

The Most Rigid Bed on the Market

Note the construction of the corners

3 PINS—ALL IN SERVICE

35 Designs of Hospital Beds
Complete Line of Bedding

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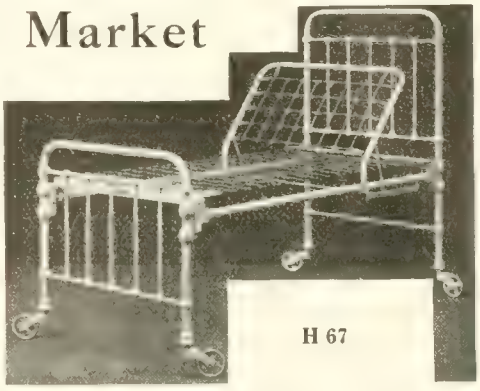

H 67

Hammock Invalid Bed

THE ALLISON LINE

of

Physicians' Equipment and Hospital Supplies is COMPLETE, UNEXCELLED, and GUARANTEED

AUTOMATIC TABLES AND CHAIRS
INSTRUMENT AND MEDICINE CABINETS
DRESSING STANDS, IRRIGATORS

RECEPTION ROOM FURNITURE
Vibrators, Sterilizers and Accessories

Special Discounts to Hospitals *Send for Catalog*

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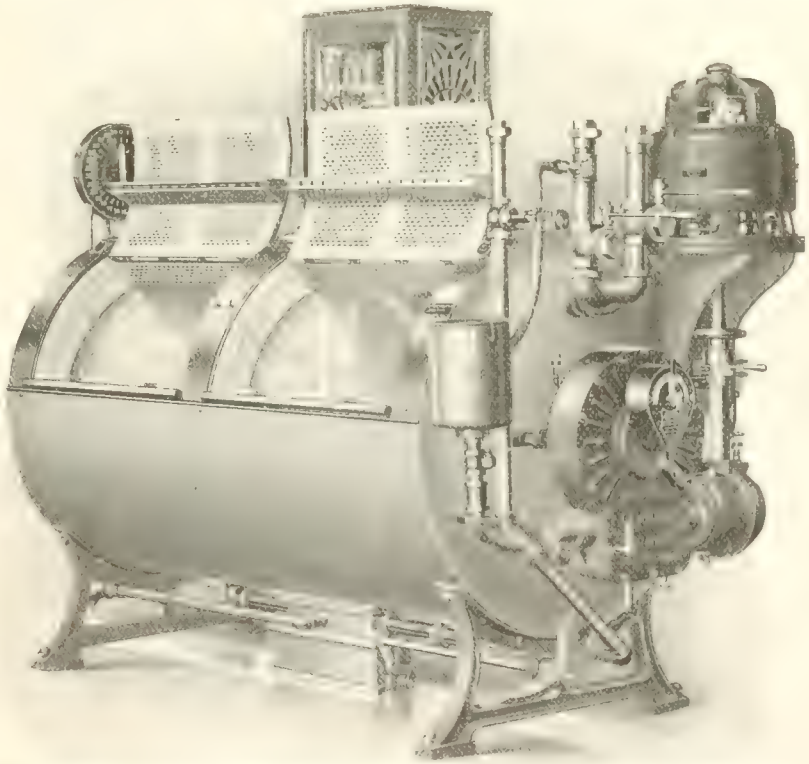
Style 128

Rolling and Invalid Chairs

DISPLAY SAMPLES AT REDUCED PRICES



Machines like this in: Peter Bent Brigham Hospital, Brookline, Mass., two in New York Hospital, New York, two in Presbyterian Hospital, New York; one in Brooklyn Hospital, New York; one in Bridgeport Hospital, Bridgeport, Conn.; three in Fort Pitt Laundry, Pittsburgh, Pa., and a number of other places.

The 1915
Henrici Washer

A Master Machine

which is so far in advance of any other built that **comparison is impossible.**

Hotel and hospital linen is washed in from 12 to 18 minutes; sanitary, hygienic.

Quadruple Output

It will interest you to read our Circular No. 11

HENRICI LAUNDRY MACHINERY CO.
Boston, Mass.

Use the Henrici for Economy

This Foster Friction Plug Prevents Slipping

You already know the hygienic value of rubber heels made of good, live, resilient rubber. You know that they take the jolts and noise and tired feeling out of walking. But it is equally important that they safeguard against the danger of slipping and falling. Many accidents—such as fractures, dislocations, and sprains—are due to this cause.

CAT'S PAW
CUSHION RUBBER HEELS

have made walking not only comfortable, but *safe*. It is the Foster Friction Plug that prevents slipping and sliding, and the live resiliency of the rubber that makes walking and standing comfortable.

Hospital floors must be smooth to be sanitary. The Foster Friction Plug in Cat's Paw Cushion Rubber Heels gives you a firm, sure footing on smooth, slippery surfaces. Also, the Foster Friction Plug will give you longer wear at the heel.

The patient who is "learning to walk again" will be wisely protected by Foster Friction Plugs.

Cat's Paw Cushion Rubber Heels are worn regularly by thousands of physicians and nurses who recognize their superiority. They cost no more than other kinds. The name is easy to remember.

Price, attached, 50 cents
At any Shoe Store

Foster Rubber Co.

Originators and Patentees of the Foster Friction Plug, which Prevents Slipping

114 Federal Street, BOSTON, MASS.

McCALMONT HUMANE RESTRAINT

Patented

Linen being changed while patient is under restraint

Safe—Sanitary—Sane

Use This Device and Avoid Fatalities in your Institution

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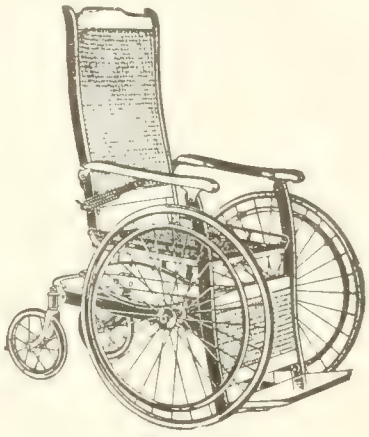
"Toledo" Invalids' Chairs

First in Quality and Quick Shipments



You can depend upon prompt service *always.*

Most patterns shipped from stock same day order is received.

The Toledo Metal Wheel Co.

Toledo, Ohio

OPERATING ROOM—MT. ST. MARY'S HOSPITAL, NIAGARA FALLS, N. Y.
VITROLITE installed in Operating Rooms, Toilets, Baths, Kitchens, Etc.

VITROLITE

"BETTER THAN MARBLE"

IN

Mt. St. Mary's Hospital

AND OTHER HOSPITALS

SELECTED BECAUSE IT IS

Absolutely Sanitary

Economical

Acid-Proof

Unexcelled for Hospital Use

What they say about VITROLITE installation in Mt. St. Mary's Hospital

From the Hospital:

"We are glad that we made a choice of VITROLITE instead of marble for our new hospital building. We have tested VITROLITE in our pharmacy for over nine months and it is absolutely spotless. Marble under the same tests absorbed acids and oils and was discolored."

The Sisters of St. Francis

From the Architect:

"I selected VITROLITE for Wainscoting Operating Rooms, Toilets, Baths, Etc., in St. Mary's Hospital, because it is the handsomest and most sanitary material for use where absolute sanitation is desired. The installation here is much admired by everyone—other hospital authorities, visitors, etc."

Wm. P. Ginther

On the Installation

"The VITROLITE installation in this hospital was made after having been put to severe tests by the hospital authorities. It is one of the most up-to-date and complete hospitals in the country, and they wanted an absolutely sanitary material. It attracts a great deal of attention."

E. J. Walker

Write for samples and catalogue

THE VITROLITE COMPANY **PARKERSBURG, W. VA.**

Concerning Medicinal Malt Preparations

THE manufacture of malt preparations for medicinal use is a highly specialized professional work, and is successfully accomplished only under the direction of competent chemists. While in some respects similar to the brewing of beer, there are vital differences both in the materials which enter into these products and the processes of manufacture.

ANHEUSER-BUSCH'S
Malt-Nutrine
TRADE MARK.
the food-tonic

is the recognized standard of medicinal malt preparations of its class. The materials used in its manufacture are specially selected and safeguarded. Only the choicest Barley-malt and Saazer hops are used, and the finished product contains all of the soluble substances of these two materials.

Malt Nutrine is a perfect malt preparation, and should not be confused with cheap dark beers, many of which are represented to be medicinal malt products.

For the hospital patient, physician, or nurse who is in need of a refreshing, appetizing, nourishing and mildly stimulating liquid food, ***Malt Nutrine*** is most serviceable. It is low in alcohol strength (less than 2%), but high in food value (14% of the solids extracted from malt and hops).

Pronounced by the U. S. Internal Revenue Department a PURE MALT PRODUCT, and not an Alcoholic Beverage

Sold by all druggists

ANHEUSER-BUSCH *SAINT LOUIS*

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"HYGENIA"
Sanitary Composition Floors
are a
Hospital Necessity

"HYGENIA" Floors and sanitary cove base render your hospital sanitary, fire, water, dust, germ and vermin-proof.

"HYGENIA" floors are as easy of tread as linoleum and will last a lifetime. Let us SHOW YOU.

Estimates and samples cheerfully furnished

NATIONAL HYGIENIC FLOOR CO.
Sole owners and manufacturers of "HYGENIA"
1911-13 Pine Street St. Louis, Mo.

Do You Require Your Nurses to Break Ice By Hand in the Ward?

No. 59. Creasey Ice Breaker

Breaking ice by hand doesn't pay. There is a cheaper and easier way to do it that will give more uniform ice with less waste, viz., the Creasey Ice Breaker. No commercial institution having to feed and care for as many people as does the average hospital would be without a Creasey, purely as a business proposition. If your board finds it hard to make ends meet, there is so much the more reason why you should use the Creasey.

Let us send you for thirty (30) days' free trial a hand-driven machine like cut that will take a cake of ice 7x9¼ in. We ask only that you guarantee freight both ways if the machine is returned. Ready for shipping, it weighs one hundred pounds. There are fourteen different sizes of Creaseys.

JOS. S. LOVERING WHARTON
3112 North 17th Street PHILADELPHIA, PA.

BECAUSE the Emmerich organization has devoted its brains and capital for sixty years exclusively to the making of pillows

Because the Emmerich factory was built and equipped for the sole purpose of treating feathers and making pillows

Because the Emmerich organization has men in its employ who started as boys and who, therefore, know the feather and pillow business from the ground up. The employees are experts, not mere laborers; each is skilled in his line.

BECAUSE each department of the Emmerich factory is supervised by a member of the company whose interest it is that the best product possible be manufactured.

Because these men love their work and cherish the ambition to remain at the top in the making of pillows.

Because the Emmerich factory is located in the central market for feathers; it has its own side track; it can distribute economically and save where saving should be made.

SOME OF THE REASONS FOR THE SUPERIORITY OF EMMERICH PILLOWS

CHAS. EMMERICH & COMPANY
CHICAGO

Patent November 25, 1913
Piedmont Jr. Bedside Table

Modern Hospital Furniture

NEW PIEDMONT BEDSIDE TABLE

Many new features make this table the leader of them all. Used in over 1,200 Hospitals. Adjustment very simple. Base rigid, and supplied with large set screws. Made in wood and metal tops.

Write for samples and prices

If interested in other Furniture, write us. We have some interesting prices to make you.

Western Surgical Supply Co.

CINCINNATI, OHIO

PURITY RUBBER GOODS
PURITY ENAMELWARE
PURITY THERMOMETERS
PURITY SILK-WORM GUT
} The Leaders of them all

"Knuklfit" Surgeons' Gloves

The Acme in Surgeons' Gloves

MADE OF SELECTED FINE PARA RUBBER

IT IS OBVIOUS

THAT—"The knuckles are the largest part of the fingers."

THAT—"Unless there is a bulge in the glove fingers at these points, free action of the fingers will be impaired."

THAT—"The plain fingered glove will bind across the knuckles and cause tension on the finger tips."

THAT—"Tension on the finger tips impairs that sensitive cuticle touch needed by surgeons while performing operations."

WHY have many surgeons bought oversized gloves? Because they have been unable in the past to buy a perfect-fitting glove and yet enjoy comfort, free action of the fingers, and sensitive cuticle touch.

OUR GUARANTEE

We guarantee our medium-weight gloves not to vary over 3/100 of an ounce per glove, bear more sterilizations, and give greater comfort to the wearer and a more sensitive cuticle touch. If they fail in any one of these features, return the gloves and we will refund you your money.

THE LINCOLN RUBBER COMPANY

AKRON, OHIO

Just a moment, please—

Compare this price with what you are now paying, and see how many dollars you can save on each purchase. Remember, all our products are guaranteed.

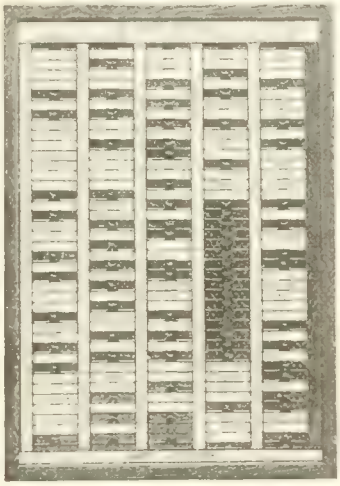
Absorbent Cotton 15 Cents Per Pound

A postal will bring our complete hospital catalogue

Phoenix Surgical Dressing Co.
MILWAUKEE, WIS.

UNIVERSAL HOSPITAL PATIENTS' REGISTER

Style D-2



Shows Private Rooms, Wards and each bed therein.

We specialize on HOSPITAL REGISTERS of all kinds; making them to order and to fit any requirements, also of any size and for any size card desired.

Send for our catalog, which fully illustrates and describes our entire line.

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Foster "IDEAL"
Hospital Beds and Cribs

Used in Many Institutions

Are made strong and heavy. Three-piece construction; head, foot and springs. Springs are made with woven wire, National or Link fabric, and with angle sides or tubular sides. Malleable corner connections assure strength, rigidity and convenience in setting up.

We show many patterns in our catalogue and make special beds to any specifications. Write for a copy of our special institution bed catalogue.

No. 309

Tubing, 1 5/16 inches; cross rods, ⅝ inch. Regular height of head, 36 inches; foot, 32 inches; spring, 17 inches from floor. The spring can be placed higher from floor, on special orders, by making the head and foot higher, at a small extra charge. Regularly furnished with "Q" National spring, as shown.

Foster Bros. Manufacturing Co.

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Indirect Lighting

is no longer regarded as a luxury so far as it applies to hospitals.

It is now considered a necessity where proper equipment is essential.

Scientific tests have served to establish the fact that Indirect Lighting is almost a perfect substitute for good daylight. These tests show that the loss of eye efficiency after three hours' work by daylight and the various methods of artificial lighting is about as follows:

Daylight	5 per cent
Indirect Light	11 per cent
Semi-Indirect Light	75 per cent
Direct Light	86 per cent

The Eye Comfort System

(with X-Ray Reflectors)

is the only Indirect Lighting System that has been developed in accordance with the laws of light.

This is the system that is being installed in well equipped hospitals throughout the country. It provides for adequate illumination without waste of current.

Send for our booklet, "Indirect Lighting for Hospitals." Lighting Our Architects' Portfolio, which standardizes lighting specifications, is sent free to architects and engineers. To Others $5.00.

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"A PERFECT REST"

The "MERCY-REST" gives the patient the position "that just fits."

The ***patient*** in bed or the ***nurse*** can work it—***"EASY."*** There are no "gears," "ratchets," or "dogs" in it to grind or trip.

The "MERCY-REST" is easily attached to brass or iron beds, is never in the way, and is always ready for use.

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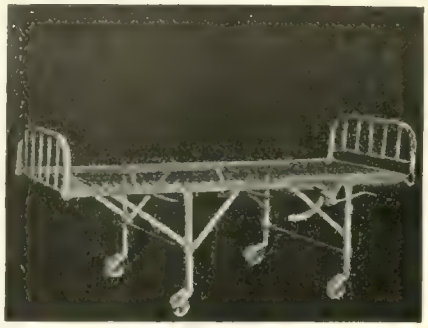
ALANSON C. NOBLE, President
339 S. Wabash Avenue, CHICAGO, ILL.

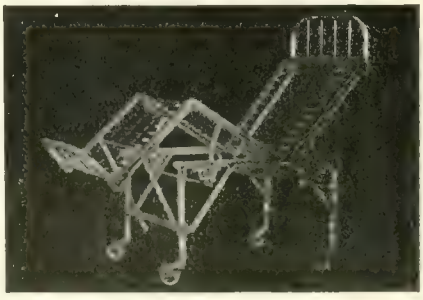
The Way Chair Bed



Used as regular bed

Can be adjusted to any desired position.

Can be used as a wheel-chair.



The Fowler position

Price, complete with strictly high-grade cotton-felt mattress $30.00

With hair mattress $35.00

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MINNEAPOLIS BEDDING CO., Manufacturers
MINNEAPOLIS, MINN.

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THE REFRIGERATOR EQUIPMENT

for the new

CINCINNATI GENERAL HOSPITAL

One of the 32 Ward Kitchen Refrigerators is shown in cut

Many costly mistakes are made by the installation of improperly designed refrigeration which could easily have been avoided by expert advice.

The C. Schmidt Company is prepared to furnish

EXPERT AUTHORITATIVE ADVICE

to Boards of Trustees or Hospital Superintendents guaranteeing them the maximum refrigeration results at minimum cost and will furnish them

PLANS AND SPECIFICATIONS

and consultation with their experts free of charge.

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The Plaster That Stands Hard Knocks

The Plaster For Hospitals

Tough, enduring, sanitary, permitting of complete sterilization, adhering equally to concrete, brick, tile and lath—it constitutes the inevitable plaster for hospitals where the most satisfactory results are required.

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For the Trained Nurse

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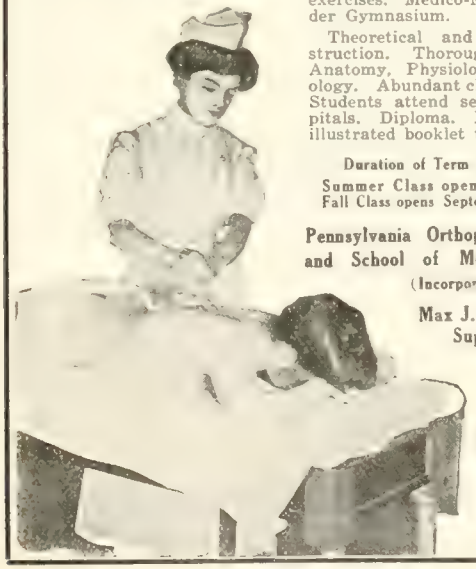
Increases Your Earnings

All branches of physiologic therapeutics, including electric light, blue light, dry hot air baths, baking, vibrators, nebulizers, solar and leucodescent lamps, Bier's hyperemia method, galvanic, faradic, static electricity, high frequency, sinusoidal currents, x-ray, Dr. Schnee's four-cell bath, Bachelet magnetic wave, Nauheim baths and Schott exercises. Medico-Mechanical Zander Gymnasium.



Theoretical and practical instruction. Thorough courses in Anatomy, Physiology, and Pathology. Abundant clinical material. Students attend several city hospitals. Diploma. Particulars and illustrated booklet upon request.

Duration of Term Four Months
Summer Class opens July 6, 1915
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A COMPOSITION FLOORING guaranteed not to crack or crumble—not cold like marble and tile—yet durable, sanitary and fire-proof. Smooth, but not slippery. May also be laid over old or new wood or concrete underfloors.

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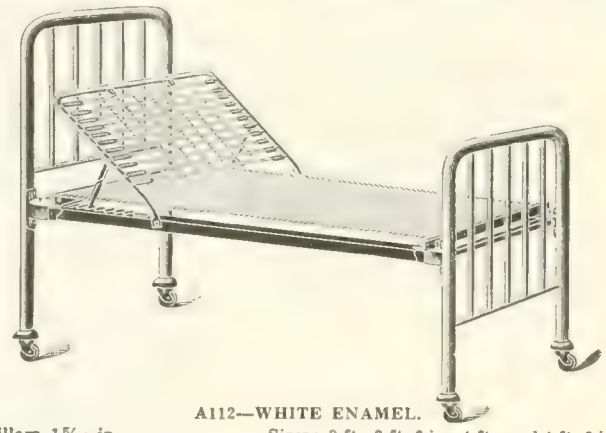

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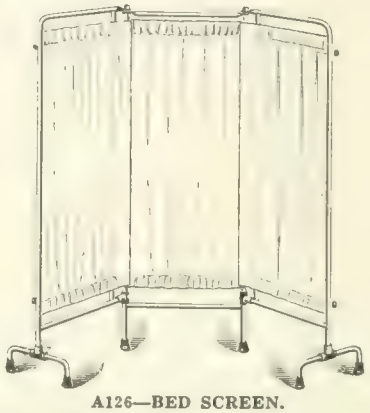
Pillars, 1 5/16 in.
Filling, 7/8 and 1 1/16 in.
Head, 48 in.
Foot, 36 in.

Sizes: 3 ft., 3 ft. 6 in., 4 ft., and 4 ft. 6 in.
Fabric, Heavy double weave.
Ribs, 1¼ in. apart.

Weight (6 ft. 3 in. long by 3 ft. wide), 116 lbs.
Height from floor to top of spring, 23½ in.

THREE-PIECE BED ON STEEL ANGLE FRAME—STANDARD RAIL CONNECTION.

Made with Adjustable Back Rest, unless otherwise ordered.



A126—BED SCREEN.

Small Size:	Large Size:
Height, 5 ft.	Height, 5 ft. 6 in.
Width, open, 5 ft.	Width, open, 7 ft. 6 in.
Width of wing, 1 ft. 8 in.	Width of wing, 2 ft. 6 in.
Frame made of 5/8-in. tubing.	Rubber tips.
Curtain rods, ¼ in.	Shipping weight, 25 lbs.
White enamel.	In ordering give size desired.

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Manufacturers of High Grade Institution Beds and Hospital Furniture

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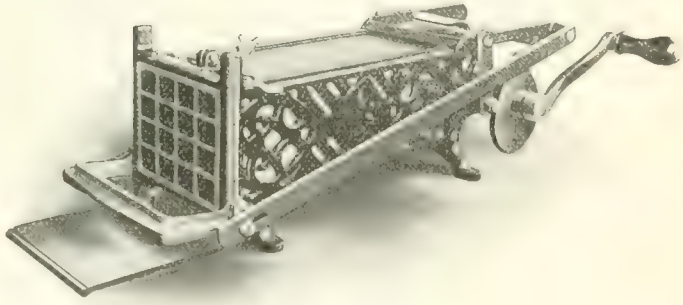
THE AUTOMATIC INDIVIDUAL BUTTER CUTTER



CAN be regulated to cut 26, 32, 35, 40, 48, 60 and 90 patties to the pound. Every patty uniform. A great time-saving machine that pays for itself in a very short time.

Shipped on ten days' trial.

Send for our circular.

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Burton Hand Power Dish Washer

with Burton steel scrap table and maple clean dish table, constitutes the ideal equipment for any quantity of dishes up to 1,500 per hour.

Complete Power Dish Washing Equipments

up to any capacity.

Write us your requirements.

THE BURTON RANGE COMPANY

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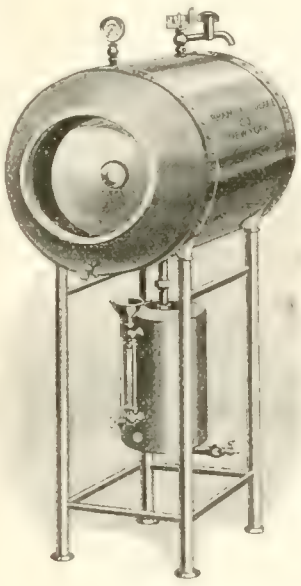
"Eclipse" Patented Autoclave

Similar in construction to our well-known "Eclipse" Surgical Dressing Sterilizer, except in its capacity and jacketing.



The steam fills the outer jacket and enters the inner chamber at once. This operation prevents the contents from becoming moist by the condensed steam.

Can be used as a free steam, nonpressure sterilizer by opening the air cock if desired. Mounted on white enameled stand. Heated by steam, gas, gasoline, petroleum, or electricity.

Our Eclipse Door (the "fool-proof" door, as many experts have termed it) is one of the many exclusive features of both our sterilizers and autoclaves.

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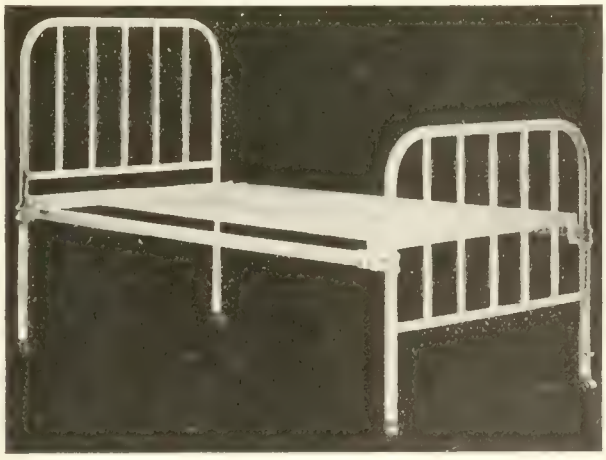
Having Malleable Iron Locks
Guaranteed Unbreakable



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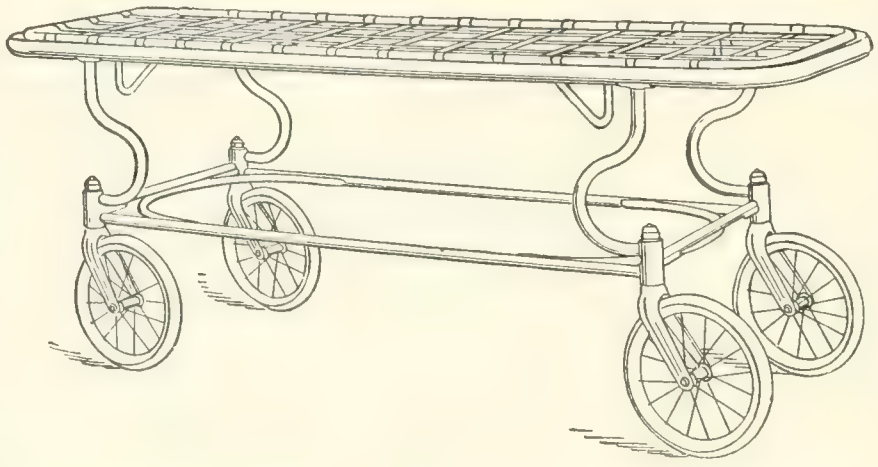

Heavy wrought steel construction. Baked white enamel finish. Detachable steel stretcher top. 1¼-inch endless rubber cushion tire (U. S. patent September 20th, 1910) encircling the entire top, to prevent marring of walls, etc. Mounted on four swivel wheels, all having 12-inch x 1¼-inch endless rubber cushion tires. Size, 20 inches x 72 inches. Height, 31 inches.

These Stretchers have endless rubber cushion tire encircling the entire top to prevent the marring of walls, corridor corners, and door frames.

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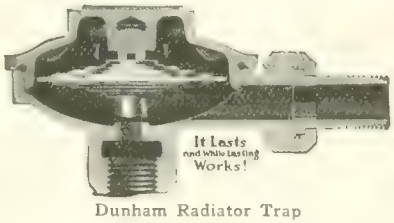
DUNHAM SYSTEM
OF
VACUUM STEAM HEATING



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Especially adapted for hospital heating on account of the fact that it produces absolutely noiseless circulation of steam throughout every radiator in the building.

The Dunham Radiator Trap, which is connected to the return end of every radiator in the building, allows the free passage of all water and air from the radiators without loss of steam. This means that the highest possible radiator efficiency can be produced with the Dunham System. Tens of thousands of these traps in use on Dunham Systems in the United States and Canada.

Write us for further information in regard to hospital heating.

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Marshalltown, Iowa

Branches in all principal cities

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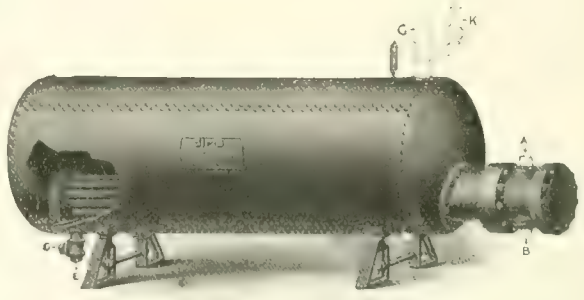

Hot Water and

plenty of it, is assured by using a SIMS STEAM TUBE STORAGE TYPE HEATER. Note the tube structure—straight seamless drawn brass tubes, on the bottom of the tank where most effective. Tubes easily cleaned without breaking steam connections.

Heaters furnished in all sizes—storage and heating capacity—for live or exhaust steam.

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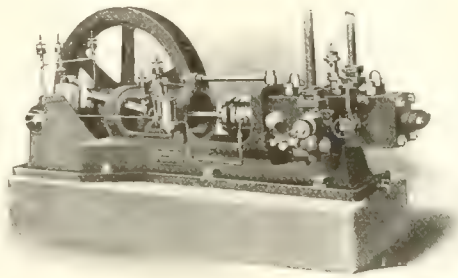
EFFICIENT refrigeration in any part of the hospital at all times means a tremendous net saving of waste material and waste energy throughout the entire establishment. This can be obtained safely and economically by installation of the



Kroeschell Carbonic Anhydride Compressor

KROESCHELL REFRIGERATION SYSTEM

CARBONIC ANHYDRIDE

WE have made a specialty of hospital equipment and refer you to the following partial list of hospitals we have equipped with the Kroeschell Carbonic system:

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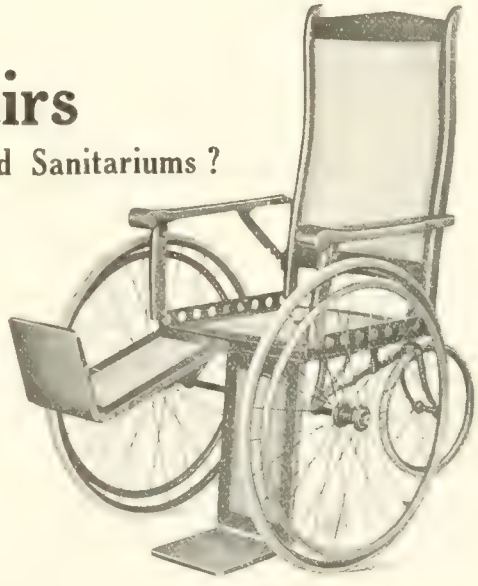
Betz Invalid Chairs

For Use in Its Soldiers' Homes, Hospitals and Sanitariums?



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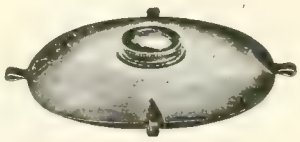
Our gloves are made from the finest Para Rubber, in light, medium and heavy weights; also reinforced and pebbled.



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Write us for our new catalogue just off the press

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Check the items above in which you are interested, mail us, and we will send prices and samples.

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Specially Adapted To Hospital Use

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Very sanitary, as it can be sluiced with water same as a cement floor.

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Also headquarters for Bleached Gauze, Bandage Muslin, Crash Toweling, etc.

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It is one of our latest hospital specialties, and its practical usefulness is being demonstrated by more and more hospitals.

It can be furnished you in any size.

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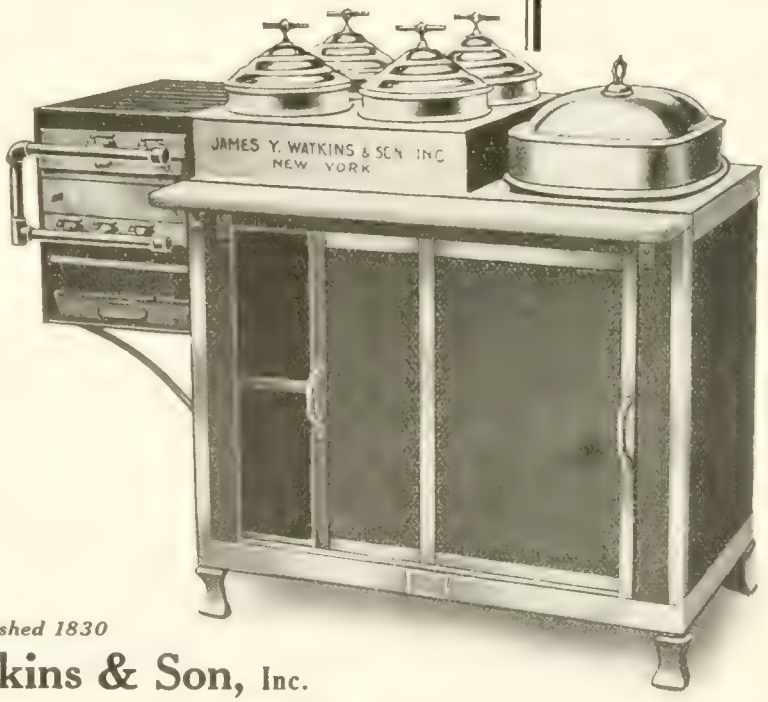
Plans and specifications submitted for kitchen equipments of any size. Repair work a specialty. Send now for catalogue.



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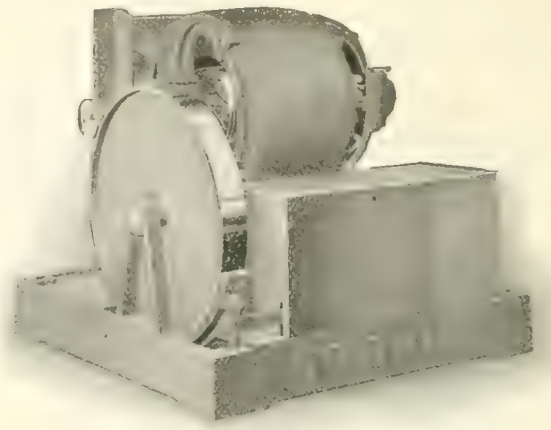

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Designed especially for

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Also Hand Dumbwaiters and Hospital Lifts

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So-called Vichy in syphon, bulk or drawn from the soda fountain, is

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Remember—and always use the name

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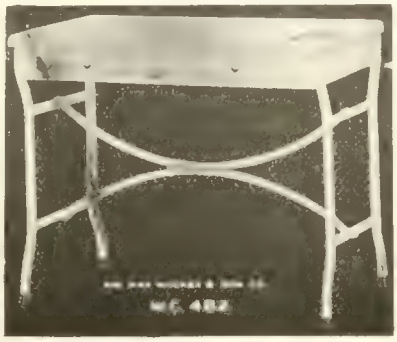

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Of the most modern design with Imperial baked white enamel finish.

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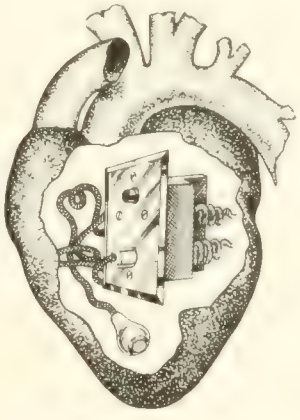
The Heart
of the Hospital



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TILEINE is laid solely by expert workmen in the exclusive employ of this company.

The success of TILEINE is due largely to this expert method in laying.

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WE publish the only book of this kind on the market. It was designed by Mr. J. R. Coddington, known to many hospital officials as an expert on hospital record systems and as a hospital superintendent of many years' experience.

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LET us estimate on any printing you may require. We are hospital printing specialists and can undoubtedly save you some money.

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No sale of "Wyandotte", Yellow Hoop is ever considered completed until the launderer is satisfied that he will receive 100 cents in value for every dollar he exchanged for the "Wyandotte", Yellow Hoop. This expressed or implied guarantee is understood to be a part of every sale, and we are as willing to make good this guarantee to-day as we were on the day it was first made.

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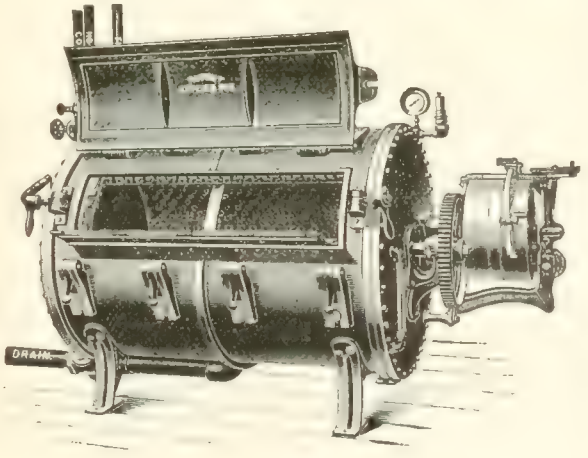

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Laundry Machinery and Appliances

For the Modern Hospital
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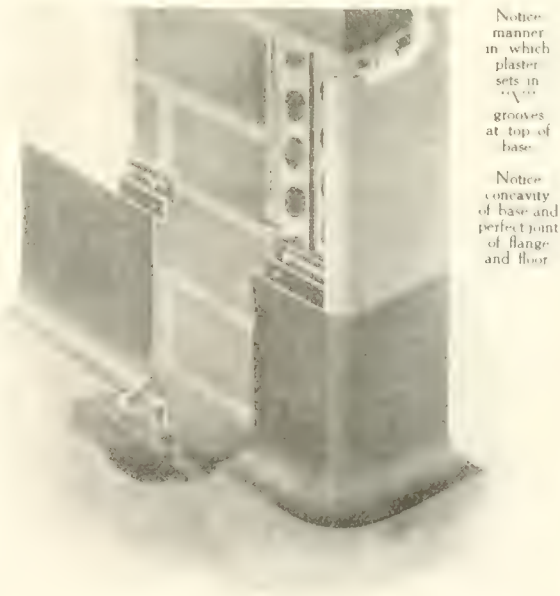
Notice manner in which plaster sets in "V" grooves at top of base
Notice concavity of base and perfect joint of flange and floor

THE KNAPP SANITARY METAL COVE BASE is lighter, less expensive, infinitely stronger, and makes a better union with the wall, than any other base, whether made of marble, terrazzo, or other material.

The KNAPP proposition is one that it will pay you well to investigate before building. Write for booklet showing styles and construction.

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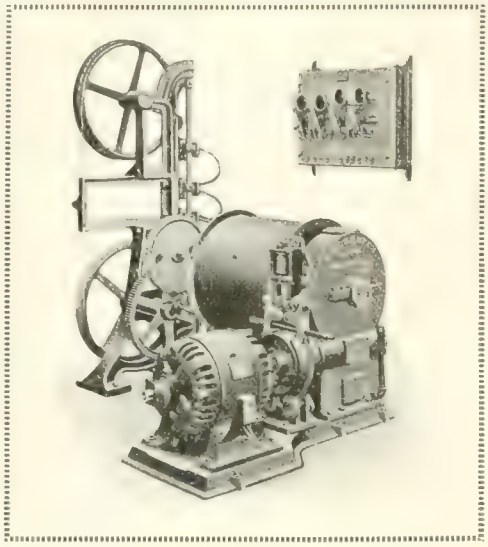

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PUSH BUTTON CONTROL elevators must be made so that it is impossible for accidents to happen. We have equipped hospitals with elevators (hydraulic, steam and electric) for forty years, one of our latest installations being that in the new Mayo Clinic at Rochester, Minnesota. The following features of

KIECKHEFER ELEVATORS

make them particularly suitable in hospitals:

A FLOOR STOP DEVICE which indicates the direction of travel of the elevator, and functions to bring the car to a stop exactly opposite the landing, so as to eliminate the likelihood of stumbling.

AN EMERGENCY STOP DEVICE by which the car may be brought to a stop at any minute by pressing a button.

A DOOR SAFETY SWITCH which operates so as to prevent movement of the elevator when any of the doors are open.

A MECHANICAL LOCK which prevents opening of door unless cage is at landing.

HATCH LIMIT SWITCHES and a SLACK CABLE SWITCH which opens the control circuit if the car should over-travel or meet with any obstruction in descending.

Cutler-Hammer controller is used, especially designed for this type of elevator. The main line switch is equipped with a blowout magnet to prevent arcing. An electrical interlock is used to prevent closure of the main line switch except when all the starting resistance is in the armature circuit.

We will be pleased to explain the more intricate details of Kieckhefer Elevators on request.

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The Barnstead UTENSIL STERILIZER
With Automatic Lift

The Latest *The Best*

By a pressure of the foot the cover opens as desired. The cover may be opened and closed independent of the automatic lift.

It is simple in construction, is not liable to get out of order, and all parts are accessible for cleaning.

When the cover is open wide, as illustrated, the automatic lift causes the tray and contents to rise and to recede when the cover is closing.

It may be used in combination as an instrument and utensil sterilizer.

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The Barnstead Water Still Co.
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feet of Hospital floors installed during the past year and every foot is

SANITARY
FIREPROOF
QUIET
RESILIENT
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Manufactured and installed by the

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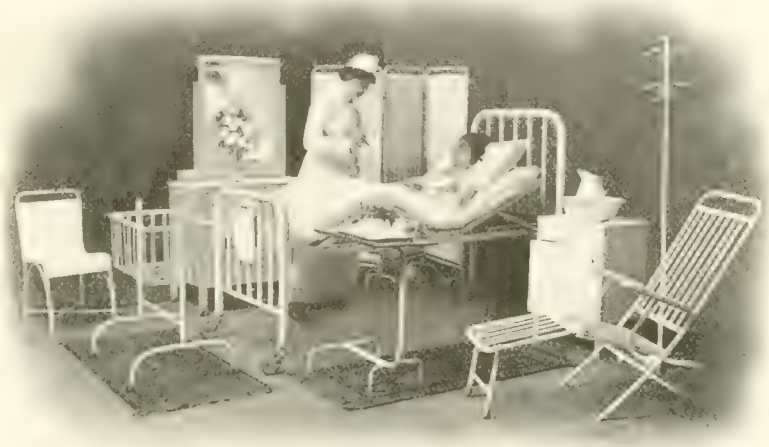

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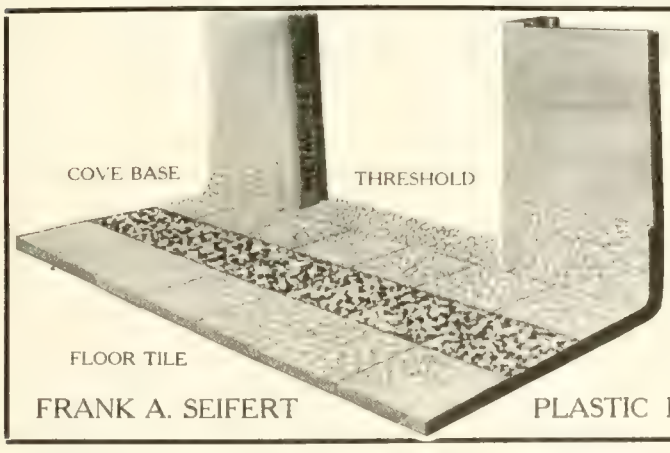

MARBLE MOSAIC FLOOR TILE, SANITARY COVE BASE, ONE-PIECE STAIR TREADS AND RISERS CAST IN SECTIONS AND MADE WITH HYDRAULIC PRESSURE, THEN SET SAME AS MARBLE WORK. THIS IS THE ONLY WAY YOU CAN AVOID CRACKS. BEING MADE WITH HYDRAULIC PRESSURE AND STEAM CURED, WE GET THE MAXIMUM STRENGTH FROM THE PORTLAND CEMENT WHICH IS OUR BINDER. OUR SANITARY COVE BASE AND FLOOR TILE WAS USED IN THE BARNES AND ST. LUKE'S HOSPITALS, TWO ISOLATION WARDS OF OUR CITY HOSPITAL AND MANY OTHERS LESS RECENTLY.

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MED-O-LIN USED BY THE JOHNS HOPKINS HOSPITAL INSTEAD OF RUSSIAN WHITE OIL

¶ An Ideal Cathartic acting entirely by it's Lubricating Properties.
¶ An Ideal Lubricant for Sounds, Catheters, Stomach-tubes, etc.
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A Prominent Hospital Authority Advocates DISTILLED WATER for Hospitals

Says it is invaluable

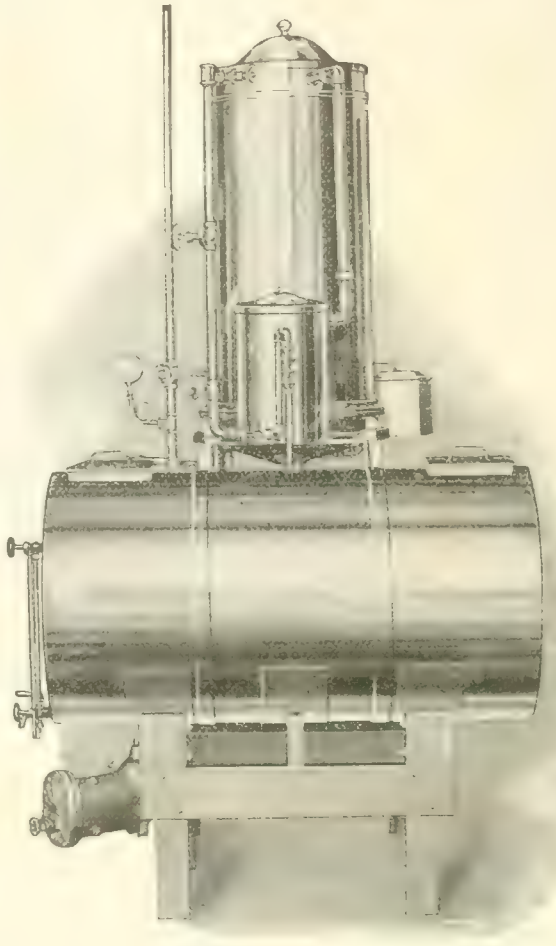
"In the course of the work that was done, it was found that all the bacteria were destroyed and that the water in the retort was absolutely sterile. As to the second contention, in operations on dogs, and also on humans, using distilled water to wash out the cavities, it was found that the water did **not** take up any appreciable quantities of salt, and that water that had gone through the cavities had its salt content increased by only the amount of salt that was contained in the small amount of blood that was actually washed out.

"These points being settled in favor of distilled water, it becomes very certain that distilled water is the better form for use in operating rooms because beside being perfectly sterile it has had taken out of it all the solid constituents which occur in sterile water as sediment.

"So that distilled water has all the advantages and none of the disadvantages of filtered sterile water.

"I have no doubt in my own mind that the sterile water of the future for operating rooms is to be distilled water."

AN OPINION ON DISTILLED WATER



THE POLAR WATER STILL

Distilled Water on Every Floor

There are no bacilli in water distilled from a Polar Water Still. The water is *sterilized.*

There are no mineral or organic impurities in water from a Polar Water Still. The water is *chemically pure.*

There are no empyreumatic gases or odors in water from a Polar Water Still. Such gases are *cooked out* before the water is vaporized.

Because there are no such gases in water from a Polar Water Still, the water is *palatable* and not "flat."

Pure water is not "flat." It is the presence of empyreumatic gases that give it this objectionable quality.

Because of the *aeration with sterile air* that it receives, the water from a Polar Water Still is further improved so that it is sold now all over the country as a table water of the best grade.

The Polar Water Still is compact in construction, easily cleaned when desired, requires almost no attention, and furnishes water *at a cost of one-fifth cent per gallon.*

Send a postal for our catalogue covering every detail of construction; also for sizes, cost of installation, and a long list of users.

THE POLAR WATER STILL COMPANY

OPERATED BY KENNICOTT COMPANY

Manufacturers of Water Softeners, Water Filters and Water Weighers

Sales Office, Corn Exchange Building, CHICAGO **Plant at Chicago Heights, Illinois**

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Save 2/3 of Your Expense

WESSON OIL costs you less than a cent an ounce and makes a more delicious salad dressing, a finer shortening, a better cooking fat, than anything unless it be creamery butter, which costs three times as much.

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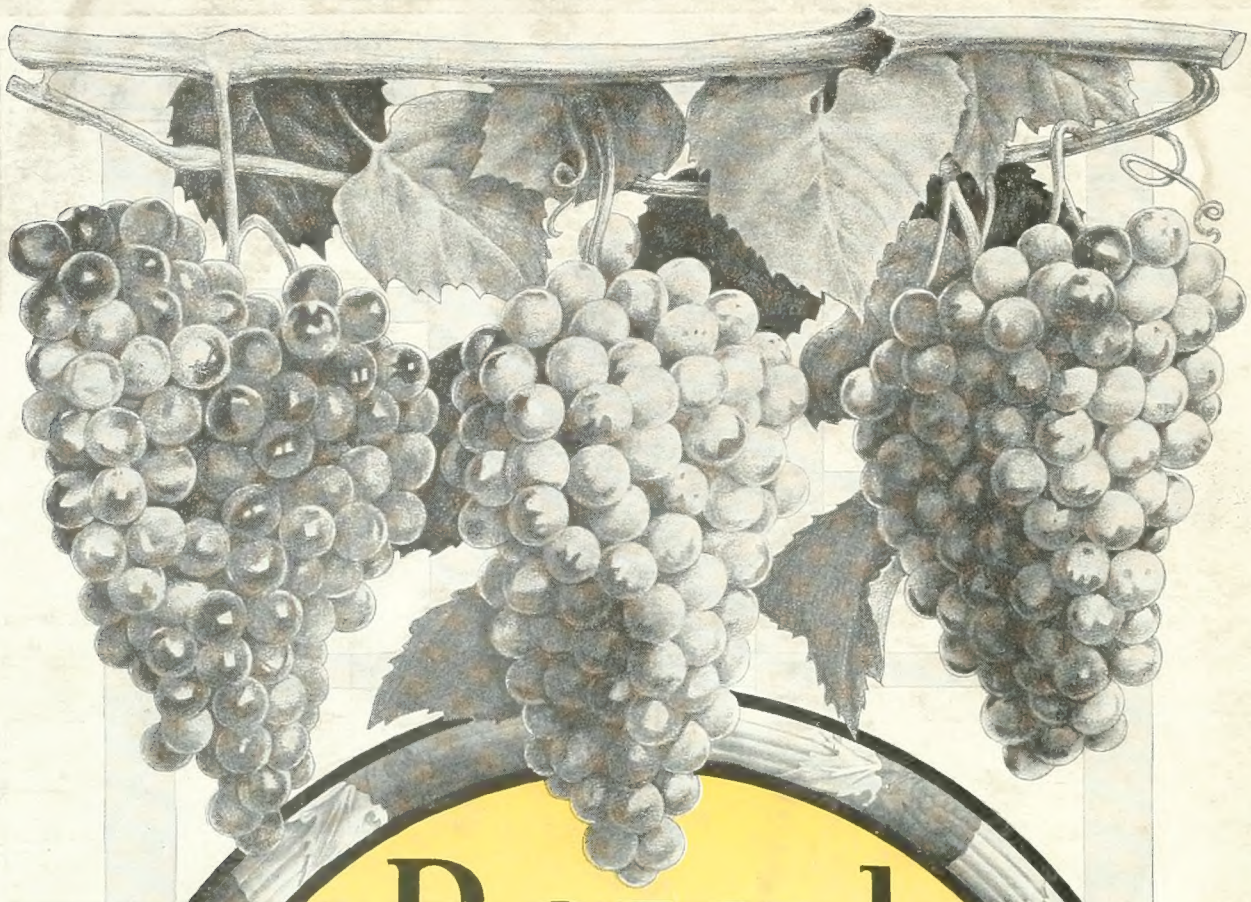
We want to send you a can to try out. We want to send it free and we want to send it big enough so that you can fry with it and shorten with it and make the most delicious salads with it at our expense. After you have found how good it is and how cheap it is you will buy it in our largest containers, we believe, as do many hospitals now. The Southern Cotton Oil Company, 90 West Broadway, New York.



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BAKING POWDER

is always given preference in those kitchens from which food of the highest quality is served.

Ingredients of baking powder that are uncertain in action, digestion-retarding, badly compounded, or impure, are not only injurious to health, but make the food unpalatable.

The cream of tartar of Royal Baking Powder has the same wholesome effect on the digestive system as the cream of tartar in grapes, from which it is derived.

Absolutely Pure